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A
NEW SYSTEM OF LOGIC,

ADAPTED TO

MORAL PHILOSOPHY.

Second Edition,



IN WHICH ARE ADDED TWO MORE BOOKS, CARRYING IT ON TO

RELIGIOUS USE AND APPLICATION.

BY

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P R E F A C E.

ANY endeavour to improve the existing systems of Logic, must be a great undertaking; much more so the attempt to question the principles upon which they are founded. Aristotle's Logic has maintained its pre-eminence for more than two thousand years; and every effort to shake its foundations might be deemed hopeless. It must be remembered, however, that Aristotle's is a heathen system; and it may well be looked upon with wonder and suspicion, that a heathen philosopher should have so long given laws, not only to the Pagan world, but also to Christians.

This suspicion is not without foundation. Aristotle's system of reasoning is not consistent with Holy Scripture; and he has himself used it to disprove some of the fundamental truths of Revelation. The sacred writers adopt a style of reasoning which is wholly opposite to it in character; and it is impos-

sible but that the habit of mind acquired by a study of the *Organon* must greatly unfit the proficient for the examination of Scriptural truth. If this be the case, the existing forms of Logic must ultimately be set aside, whenever a more true and perfect system shall be found to take the place of them. An endeavour is made to effect this object in the ensuing treatise.

The present season seems to be well suited to such an undertaking, and preferable to that in which the work was originally written. The First Book was completed in the year 1829; the second shortly afterwards. Since that period very many new things have arisen, which could not then be anticipated. The public mind has become habituated to new measures and opinions, in morals, in religion, and in politics. Society seems about to be reorganised upon new principles. And in the midst of this general disturbance of old notions, and ripeness of new ones, it cannot but be felt that the present systems of Logic are insufficient to settle the opinions of men, or even to assist them in coming to a conclusion. In consequence, these old forms are likely to share in the general disrespect, and to be consigned to disuse and oblivion. A new and improved system, therefore, is required, to supply the necessity of the present occasion.

The present system of Logic stands upon a foundation entirely different from former systems. It has but little reference to them, except in the way of confutation ; and though some of the early chapters are of necessity devoted to the disproof of former notions, yet the body of the work itself is distinct from these parts of it, and may be read independently of them. The chapters which may be omitted by those who have had no previous acquaintance with Logical systems, are the 1st, 2nd, 3rd, 4th, and 6th of the First Book, and Chapters I. and II. of the Third Book.

The express pretension of this New Logic is, that it is a Moral Logic : that it is peculiarly applicable to moral and religious subjects, which no other has ever been. This peculiar object and intention ought to be kept in mind throughout the perusal of it, in order to explain certain generalities, and some things which on a first view might be deemed paradoxes. To have qualified every expression so as to satisfy all objections must have rendered the style in general prolix and insipid. The whole work must be the commentary upon each passage in it. The moral use and application has been constantly present to the mind, in the expression of each principle, and the choice of every illustration. Whatever attempts at refutation may be drawn from the field of physics and mechanical philo-

sophy, I shall regard them lightly, so long as I can feel myself secure in the department of moral philosophy and human nature. One principal object of this work is to draw the general mind out of that frame and habit, in which it has confirmed itself, by the too exclusive study of physics and mathematics.

As Locke's Treatise was written to overthrow the doctrine of innate ideas, so this system, rightly understood, will be found to go far towards depreciating the use of abstract ideas. These, which are the foundation of former systems of Logic, are made no account of in this. If a want of clear abstraction and exactness of expression should be observable in some passages, this peculiarity of feature is not wholly without intention. For though much pains has been taken to render the meaning clear, and to suit it to the prevailing habit of mind in philosophising and reasoning, yet it seemed advisable to make the style and language of the work such as to illustrate in some measure the mode of thought which is recommended in it. Moreover it is obviously impracticable to express clearly a new line of thought and arrangement of ideas by the ordinary terms and generalisations of language. Nevertheless, though the present system may seem to the scientific and scholastic reader to be deficient in technical precision and exactness, yet it is confidently

believed that it is of so plain and simple a character, in comparison with all former systems, that it will be sufficiently easy and acceptable to the simple, artless, and unsophisticated mind; excepting perhaps those parts which are occupied in disproving former opinions.

I do not propose to contend that all the former treatises upon logic are worthless; or that no part of ARISTOTLE'S *Organon* is capable of being usefully applied. Aristotle contains many parts and passages of highly instructive observation and analysis; and many other useful principles and precepts, well fitted to improve the powers and habits of reasoning, are scattered up and down in various writers: though these in general are not chiefly to be found among the works of logical compilers. What I write for is, to establish certain new and fundamental principles, which I contend should be made the groundwork of future systems; in which the materials preserved from former systems, should be used chiefly for the superstructure and ornaments.

The present work has also a further view, and a still higher object. It will be attempted at some future opportunity to show, that the whole plan of forming the mind upon the model of the Greek and

Latin Classics, by an habitual acquaintance with them from childhood to maturity, is necessarily destructive of its proper tone and principle ; and tends to unfit it for the comprehension of the pure doctrines of Christianity. It may well be questioned whether the entire habit of mind and thought, the principles of analysis and reasoning, which have prevailed and had dominion in Christendom, ever since the time when "the deadly wound" which heathenism sustained in the triumph of Christianity, "was healed" by the restoration of Plato and Aristotle, and the whole circle of the Grecian and Roman literature, to the seat of empire, be not opposite to the spirit of Christian truth and motive, or can subsist in fellowship with it.

The dominion of heathen learning must be overthrown, before the reign of true religion can be established. The mind which has been trained and formed in the schools of Grecian wisdom, *cannot* see the truths of Christianity. To the Greeks they must still be foolishness.

Aristotle's logic is one of the main supports of the Grecian system ; and it enters into every form of reasoning which has been approved and adopted since his time. This habit of mind, and these prin-

ciples of reasoning, it is intended if possible to overthrow ; and to endeavour to substitute a better system in their room.

The First Book begins with refuting Aristotle's logic in its most essential point, the syllogism ; and with showing its incompetency to the task which it undertakes. It also points out the proper province of Bacon's logic ; which is physical philosophy. It thence proceeds to the analysis of reasoning in general, and particularly of mathematical proof ; the basis of which is shown to be different from what has hitherto been supposed. The book then goes on to the development of the new system of Logic ; and to show its peculiar adaptation to moral and religious subjects. Reasoning is analyzed into two operations of the mind, instead of three, as formerly divided : namely, Apprehension and Judgment ; and their operations are described. Error and Prejudice are analyzed, and the peculiar characters of each exhibited ; being referred ultimately in a principal degree to defects in the moral character. A new subject is thus proposed for study and attainment to every person ; namely, the formation of a correct *law of the mind* : which is shown to be only another expression for a sound and chastened judgment. The Book con-

cludes by a comparison of this system with the general language of the Bible; and a confirmation of its principles by this authority.

The First Part of the Second Book contains an analysis of Knowledge, and endeavours to point out what we do, and can really know; and what is necessarily beyond the limits of human discovery. The Second Part is a collection of some few of the most important and general of the Laws of Nature; and is intended to exemplify the proper form and nature of that "law of the mind," which was proposed, and put forward, as the principal branch of Logic in the First Book. The Third Part is a collection and arrangement of the Prejudices, upon a more extended plan than any which I have met with; and founded partly upon Bacon's idols. The prejudices are reduced to those faults and weaknesses in which they respectively originate.

The whole work, it is hoped, may have the effect of conveying a sound and wholesome impression, even to those who are not ready to adopt the entire system. Those only who shall become converts to the leading topic and principle, will be prepared to follow it out to the conclusions which it is intended to found upon it.

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RIGHTS OF THE POOR, AND CHRISTIAN ALMSGIVING.

EXCELSIOR.

EIRENICON.

THE BIBLE VINDICATED.

And other Works.

NEW LOGIC.

BOOK I. ANALYTICAL.

CHAPTER I.

ARISTOTLE'S LOGIC.

ARISTOTLE'S LOGIC, like most other objects of high interest, has been both overvalued, and underrated.

Its foundation rests upon a false principle:—it holds out pretensions, which it can never realise; and it requires a labour and degree of study for the mastery of it far beyond its actual merits.

Nevertheless there are parts of this system, which, if judiciously extracted, and applied rightly, are fitted to serve very useful purposes in assisting the judgment.

The most approved and generally adopted epitome of this system of logic, begins with a division of the operations of the mind; the proper subjects of which are, thoughts and ideas.

It leaves ideas however altogether, and passes abruptly to language, the imperfect means of representing them; respecting the use of which it alone professes to

furnish rules and instructions !* The consequence is, that a great part of the *Organon* is a mere treatise of grammar : as for instance, the books of Interpretation, and of Sophisms ; and if used only as such, as a defence against the fallacies of language, it would be capable of a very useful application. But ideas themselves are indistinct, and often inadequate in their conception ; requiring to be aided in their use and formation.

This, then, is the first defect in the logic of Aristotle—that it does not treat of thoughts and ideas ; but gives rules only for the use of language—the imperfect substitute for an instrument which is itself imperfect.

The very division, also, of the mental operations is absurdly incorrect, however seemingly obvious and plausible. The distinction which is made of judgment from reasoning, is without foundation. For judging and reasoning, for the purposes of logic at least, are one and the same thing ; judgment being that part of reasoning which decides on the weight of arguments, and the only part which it is within the proper province of logic to treat. More may be requisite for the purpose of disputation ; but not of truth. No rules, at least separate from those of judgment and apprehension, can be given for that inventive and discursive power of the mind, by which it collects and associates together a variety of evidences. This is the province of natural

* Quoniam vero inter *docendum* et *disputandum*, neque res aliqua, neque conceptio cui subjacet, commode in medium afferri potest ; necesse est *vicaria* utriusque *signa* substituere, quorum usum idoneum docendo, logica mentem unà ad bene operandum instruit.—ALDRICH'S *Epitome of Logic*.

talent, ingenuity, and practice. It is the art of argument and invention, not of truth.* In order to support this division, the whole province of judgment is made to consist in the mechanical use and estimate of such forms of words as convey a simple affirmation or negation : being, it is true, by a fortuitous and figurative coincidence of language, an expression of the 'judgment,' or 'sentence,' of the reasoning faculty ; not at all, however, the operation of judgment and reasoning itself.†

The *Organon*, therefore, leaves the whole faculty of judgment without use or office, except in so far as it is employed in drawing the conclusion from the syllogism : an operation which it performs professedly by virtue of the mere form of words, and not by the full exercise of that discretion, to which the term is properly applied ; and which is chiefly requisite, in the use of this system, to form and arrange the premisses. It is an act of the apprehension, and not of the judgment. This division, therefore, is wholly specious, and falls to the ground.

So that Aristotle's logic not only abandons thought, and the nature of ideas, and treats of language and expression instead of apprehension ; but it neglects

* The whole business of providing all the materials and premisses upon which the operation of judgment is to be exercised, will be shown to come within the province of apprehension ; and rules will be given, and the proper means will be pointed out, for employing it to that purpose.

† In statuendis autem propositionum legibus, spectandum est id tantum, quod *structura* postulat, non quicquid *sensus* admittit : cum illud *essentiale*, et *perfectum* sit ; hoc *mutabile* et *incertum*.—ALDRICH.

judgment altogether, in which, for the most part, lie all prejudices, error, and fallacies.

Logic also professedly confines its application to teaching and disputation: two very minor objects in the business of reasoning. And here, again, its author has himself fallen under a fallacy in language; as if, because the same word was applicable to reasoning and disputation, the whole exercise of this operation of the mind was confined to argument. But the great and important process of reasoning goes on in our own minds, through all our lives, in reading and observing, in inquiring and acting, in hearing and determining; while the business of teaching, of communicating, and arguing, is altogether secondary in use and in importance.

Logic is, further, wholly incompetent to proving anything. Not only is it insufficient, as by its own confession, for the purpose of discovery; but the conclusion, drawn by virtue of a syllogism, cannot possibly be proved by it. For, if the major premiss is universal, it begs the question: for the conclusion is necessarily contained in it. And if the major premiss is not universal, it raises only a probability: for it is a mere analogy; and the foundation, if of anything, of an induction, and not a syllogism.

Indeed, the whole theory of syllogism appears to have been founded upon a mere ambiguity in language: from supposing that the expression, 'all,' has in common acceptation the same meaning as in grammar and in technical language. But neither this, nor any other universal expression in common use, professes to assert that the proposition in which it is used is true,

without the possibility of any exception ; — and this exception may be the very conclusion itself. And every thing contained under the expression, 'all,' in mathematics, will be found, upon a proper and complete analysis, to be in every case one single and individual idea only.*

Such expressions are, in familiar conversation, applied to popular and acknowledged truths ; and syllogism, therefore, in making use of them, is competent, indeed, to produce confutation, and perhaps conviction : though inadequate to proof. The pretensions, therefore, made by syllogism, of being applicable to argument, are well founded ; for it is nearly its only province.

But Aristotle's logic is not without its use ; though its merits have hitherto been overrated. It directs to the discovery of fallacies in language : which are among those which are most misleading in the process of judgment. Though it does not treat of thought itself, and the proper province of apprehension, it distinguishes the various intent and uses of words, and forms of expressions ; and through them reflects a habit of distinguishing upon ideas themselves. The great use of correcting fallacies in language, presents itself most obviously in the common experience, that falsehood in syllogisms generally resolves itself into ambiguity in the middle terms : in the resolution of which is especially applicable the above-mentioned habit of distinguishing the intent of words. So that

* This analysis and proof, and also the entire confutation of syllogism, form the subject of the fourth and sixth chapters.

syllogism, though itself a fallacy, and incompetent to proof, may lead to the detection of other fallacies hidden within the premisses. Not that syllogism shows the term to be ambiguous; but that it directs the mind to a suspicion of it: not that it points out the nature of the ambiguity; but that it gives the mind a habit of arrangement and of analysing in language, and thus instils also a habit of distinguishing in ideas themselves.

For the advantage is not in the formal use and application of logic; but in the habit which it generates. It is not possible to put a chain of arguments into syllogisms in common conversation or writing. But the practice and habit of reducing arguments into form, creates an impression and experience, which enables us to perceive at first sight, that error exists in a certain course of reasoning, as it were intuitively.

The sum of Aristotle's error is, that he has begun his system at the wrong end: having made that the principal, which is only a branch of his subject; and abandoned those principles upon which the whole should rest, to a cursory and imperfect treatment at the last. Whereas opinion and probabilities are the very foundation of all action, and enter into and govern all the most important affairs of life, he has deferred these to the latter part of his work; where however he has shown a more enlarged sense of their importance than his followers, in his eight books of his Topics of Probabilities. On the Fallacies also, which are the next in consequence, he has bestowed only a compendious treatment. But certainty and demonstration, which are mere exceptions: which are

exercised upon subjects of very minor importance ; and such only as, being of extreme and absolute simplicity, are capable of being reduced within the empire of mere words, and forms of expression,—these, he has made the main feature and the body of his system. And if this, though the simplest branch of reasoning, has required and led to such an extension and amplification, that ‘it would require some years of painful study and application to master it,’* what might be looked for, if such a plan were to be pursued through all the ramifications and intricacies of opinion and probabilities ? Such a system must be wrong in its principle ; or at least, worthless : since it is impossible in the execution.

The defect, then, of this, as of every other false and artificial system, is, that to be brought to any thing like a form adapted for use, it requires an endless complexity. Instead of the perfection and easy applicability which is characteristic of a true and solid principle, it exhibits a multiplication of forms, and parts, and distinctions, proceeding almost to infinitude, till the instrument itself becomes far more difficult than the subject to be operated upon. It is like the cycles and epicycles of the Ptolemaic system of astronomy, as compared with the Copernican system ; and must be succeeded in like manner by something more simple and applicable. It is like human laws, as compared with the divine :—which can only regulate the outward conduct : and must necessarily, therefore, be imperfect : and at the same time, complex ; while religion fulfils

* REID'S *Analysis of Aristotle's Logic*.

its whole object, and that more perfectly, by the two simple rules, of love to God, and love to our neighbour.

Such a sentence, however, does not condemn the entire treatise as always injurious, or useless in default of a better. Neither, on the other hand, ought its many excellencies to uphold it, when a more perfect system is discovered. There is much wisdom in the Institutes of Menu; there is much instruction in the Koran; the law of honour enforces many very excellent rules and precepts. Yet none of these can be the rule of conduct to a Christian, even where they coincide with the Christian morality; neither is the system of logic advanced by Aristotle the more fit for adoption, because brilliant talents and deep observation have added to it, as branches, many very useful instructions.

The sum is this,—the logic of Aristotle is not wholly useless; though it has been greatly overrated. It is a system pursued in the wrong course, and placed upon a false foundation. It is fit to be adopted and used in part, as a branch of a more general system: instead of constituting the root and trunk. Its chief use is, as a treatise on grammar; to be employed as a help to the detection of fallacies in language. But it leaves untouched ideas themselves, except by secondary consequence. It is applicable to the purposes of argument and persuasion; but it is incompetent to proof.

Syllogism, however, the peculiar creation of Aristotle's own genius, and the crown of his whole system, will be made the subject of a separate treatment,—in which it will be shown to be a mere fallacy; to be

shallow, and inapplicable to the simplest reasoning ; and to be wholly incapable of affording a test of the real value of arguments, and degrees of probability.

If these last are the principal subject of good sense and judgment, then may there be usefulness in the following treatise.

CHAPTER II.

BACON'S LOGIC.

THE end which Bacon professes in his *Organon*, is the promotion of discovery : an object which has generally been considered as beyond the province of logic. This end, however, he has admirably effected ; and in the prosecution of it, he has placed the art of induction upon a footing which approaches to perfection. But he has done more than this ; and in cursorily treating of the idols, or prejudices of the understanding, he has laid the foundation of that branch of logic which is the real strength of it.

These, however, he has made of secondary consideration. For though he has given to them the priority of place, he has very hastily disposed of them ; and using them rather to smooth the way for the reception of his own system, than as forming a part of it, he has given his principal regard and labour to the processes of induction, which he chiefly rests upon.

But by far the most important feature in Bacon's logic is, that its peculiar province is natural philosophy ; and natural philosophy only. It is true that he professes it to be equally suitable to moral science ; and suggests a few rare examples of such subjects, as

suited to its operation. But the best test is his own use and practice; and the subjects which he himself adopts for illustration and experiment, are universally such as these: namely, light, heat, colour, magnetism, porousness, transparency, &c. Even in his *Sylva Sylvarum*, which contains a thousand phenomena, professedly examples and subjects of his philosophy, we do not find one single instance of a moral topic, considered and treated morally. But all its subjects are peculiarly physical: being such as are properly cognizable by the external senses.

His whole mind and attention is accordingly directed and devoted to this object; and many of his instructions are alone consistent with it. For instance, if we were to resolve, according to his requisition, to lay the foundation of all our knowledge afresh, and to believe nothing in future till it was proved by experience, we must suspend at once all the business of life;—and might as well resolve not to breathe again till we understood the mechanism of it. What act should we perform, if we waited for proofs of such things as, the composition of the bread we eat, the wholesomeness of medicine, the reality of our parentage? It is plain that we must take the greater part of our knowledge upon trust; and act, in all the ordinary affairs of life, upon belief and confidence. It may be otherwise in subjects of curiosity and amusement, and the prosecution of physical science and discovery.*

° Nemo adhuc tanta mentis constantia et rigore inventus est, ut decreverit, et sibi imposuerit, theorias et notiones communes penitus abolere, et intellectum abrasum et æquum ad

Bacon's logic is inapplicable to religion or morality, and to the science of real wisdom. Experience and induction are necessary to these pursuits, as they must be to every other subject. But they are not the essential and chief requisites; nor are they likely ever to be wanting. What does laboured induction do in such truths as these? That God is love:—that happiness is peace:—that anger and ridicule proceed from ignorance:—that our praise and censure are ever first moulded in our own nature. It is plain that experience, though necessary to these truths, performs but a secondary part in them; and need be such only as every person may possess. Yet every person does not arrive at these conclusions. Socrates, the greatest of all teachers of morality, drew his proofs and reasonings from a much narrower sphere than the rest of the philosophers of his day. Our Saviour chose his proofs and parables from present occurrences, and the most familiar topics of human life. There must be some other, therefore, and principal requisite essential to these subjects.

This essential is, an accurate, clear, and well-directed observation and apprehension of the subject; an observation, not of many occasions and instances superficially, but of a few intimately: a full, accurate, and complete analysis of some one particular act, or

particularia de integro applicare.—*Nov. Organum. L. 1. Ax. 97.* A conclusion from this false principle, as applicable to religion and morals, is the modern philosophical fallacy into which Archbishop Whately fell,—that we should be brought up in no distinctive religious opinion, but should form our creed, when grown up, for ourselves.

motive. This may enable us to verify within ourselves, under the proper conditions, and aided by a sound judgment,—that God is love:—that happiness is peace:—that ridicule and censure proceed from ignorance, and are originally moulded in our own character.

Bacon has also in some measure mistaken the nature of discovery, even in natural philosophy: when he supposes that he can place it equally within the reach of all capacities, by mechanical rules for the process of induction. For although it is the use and tendency of art to equalize the differences of natural talent; yet it can fulfil this object only to a very limited extent. And besides this, inventions have in reality arisen much more frequently out of an accurate observation of some one particular action or phenomenon, than out of an induction from a multitude of instances; and far more frequently still, from chance, or natural ingenuity.

Thus the cause of whiteness in foam and pounded glass was not discovered by means of an induction from many particulars; but from an accurate observation and analysis by some painter, who, desirous of imitating colours exactly, found that the sparkling point or line of a polished substance, of whatever colour, is in effect white. That the whiteness, therefore, of foam and powdered substances, arises from the multiplication of sparkling points, produced by the multiplication of reflecting surfaces. In like manner, the circulation of the blood was discovered by an acute observation and study of the use of the venal valves; the existence of attraction, by the fall of an apple.

In all which cases, chance, and a happy thought or conception, were far more essential than induction; and a just and penetrating judgment than either.

So that experience, though it is useful, and even necessary, yet it is not, in general, the main ingredient; nor the chief source of the discovery.

This, then, is the defect of Bacon's system, as exhibited in his *Organon*; not that it does not treat the proper subject, but that it treats it cursorily: instead of making it principally prominent. — Which just and proper position and prominence of each part of a subject, is one of the chief essentials of truth.

Induction is a part of Aristotle's logic; and it is the whole of Bacon's. Yet Aristotle's system is inferior to Bacon's, in that he does not place induction principally forward. In the like manner, Bacon's is itself imperfect as a moral logic, in that he makes the idols, or prejudices, secondary; and induction, which is of chief use only in physics, the prominent feature. Bacon's logic is then expressly adapted for *discovery*, in *physics*. It is not competent to moral science. Nevertheless, like Aristotle's, though suited chiefly to the times in which it flourished, and now become nearly obsolete, it contains within itself the seeds of a still higher system; though their growth and fruitfulness have hitherto been prevented, for want of being brought forth to the light and sunshine, and being more duly cultivated.

CHAPTER III.

NEW LOGIC.

LANGUAGE itself, and any rules respecting it, are insufficient, from its very great and essential imperfections, to furnish a test of arguments: as will presently appear from an analysis of reasoning, and of the powers of language. It is liable to entail numberless additional errors upon reasoning; and grammatical rules and precepts may be effectual to guard us against the fallacies of this imperfect instrument. But they are incapable of extending their use further; and of dispelling, or correcting the more hurtful prejudices of the thoughts and fancy.

The present system of logic is distinguished, therefore, from Aristotle's, in that it treats of the mind and its ideas primarily: of language, secondarily; and so far only as it exercises a disturbing influence upon ideas as the principals.

Disputation and controversy, which are the chief arena on which the fallacies of language exercise themselves, instead of holding a principal station, occupy only, in such a system, one narrow department.

It is distinguished from Bacon's logic, inasmuch

as it is adapted primarily to religious and moral subjects: secondarily only, to physics, or the philosophy of nature, as he calls it, and the external world.

It is distinguished from this last also, in that discovery is its object only in a secondary degree; while its express province is choice, and right judgment: extending itself, in the exercise of these offices, to practice and the moral conduct, and to the business even of ordinary life.

It would encourage and facilitate active, not speculative virtue: the spirit, not the controversy of religion: it would lay the foundation of judicious conduct: of sound principle: of stable character: it would advance the empire of sober truth: of real, and not fictitious happiness: of true wisdom.

We shall endeavour at a complete development of our system in this First Book; and shall begin by a just analysis of Reasoning, Truth, and Judgment.

Having then reduced Error, Misapprehension, and Prejudices to their proper sources, we shall endeavour, in the Second Book, to give some practical and particular illustrations of the best means of removing and correcting them.

But first it is necessary to dislodge the garrison from the strong-hold of Syllogism; and to possess ourselves completely of this frontier fortress: before we can advance with courage and success upon our projected campaign.

CHAPTER IV.

SYLLOGISM.

SYLLOGISM is argument reduced into form; and the pretension which it sets up is, that the particular form to which an argument is reducible, governs the conclusion, and is the measure of its truth.

We need occupy ourselves only with the simplest and most perfect form of syllogism; for if that be proved to be inefficient, and to afford no test or criterion of truth, the rest may be dismissed. And we shall make it apparent, not only that *form* is utterly incompetent to afford a test of the value of reasoning; but also that the very use of syllogism, when exalted to such a position, necessarily involves a fallacy. This fallacy is a *petitio principii*.

For every syllogism in the first figure which warrants an universal affirmative conclusion: that is, the result of which is not probability, but certainty—since, in all of them, the minor premiss is comprehended within the major—begs the question.

A general expression, such as, that “all men are mortal,” represents briefly, and so as to avoid prolixity, all the particular examples that are contained under it: as, that Socrates, Plato, Xenophon, all, of



whom we have any knowledge or experience, have been mortal. So that all the individuals comprised under the proposition, are by the mind in reality, and so also in the form of expression itself virtually, enumerated. And these are, in general or universal propositions, all the possible examples and instances that can be brought under them. The construction of the syllogism, therefore, properly analyzed is, as it were, this :—Socrates, Plato, Xenophon, &c. have all been mortal : Socrates is one of those enumerated : therefore Socrates was mortal.

This is the true and just analysis of all syllogisms which afford *certain* conclusions : being much of the same character with a certain argument often met with at the present day,—that miracles have ceased : therefore, those pretended to by this church or that wonder-worker are impostures.*

* Aristotle treats of the *Petitio Principii* in his Sixteenth Chapter of the Second Book of the First Analytics ; but he does not, in any of the instances which he enumerates, contemplate the present objection to his own system, nor give anything in answer to it. It, however, comes under his own definition and description of this fallacy,—that it is proving by itself, that which is not self-evident : *το μη δι' ἑαυτου γνωστον, δι' ἑαυτου δεικνυται* : and even under one of the very forms which he gives of it : viz. If A is proved by B, and B by C : but C must needs be proved by A : this is begging the question. For let, Socrates is mortal, be represented by A : and, All men are mortal, by B : then A is proved by B ; but B must needs be proved by A : therefore, *petitur quæstio* ; only there is one step less in this case than in Aristotle's ; and the fallacy, therefore, is the more obvious.

There is this remarkable confession by a recent advocate and expositor of Aristotle's system of logic. "It is to be observed, however, that in all correct reasoning the premisses

Now it is evident that proof may reasonably be required of the premisses of a syllogism; and that the engine of reasoning ought to be capable of supplying it: otherwise it must be imperfect. And this instrument must be applicable to the proof of particulars; since these are the parts which make up the proposition.* But since all the individual cases must be established, to warrant a general, unexceptionable rule, why should not this instrument, when *certain* conclusions are sought after, supersede the proof by general axioms; since the conclusion itself must have been proved among the rest? For surely it is easier to prove for *certain*, one particular instance, than the whole multitude of cases without exception. And if there is one exception only, this may be the very conclusion and question itself. It is far easier to prove that Socrates, Plato, or Xenophon has died, than that all men have died. It were far easier to prove for *certain*, that a particular miracle is an imposture, than that all miracles are impostures.†

This reasoning is applicable to the supposed case of universal, unexceptionable propositions; but in truth, no such propositions really exist: though it was neces-

must virtually imply the conclusion; so that it is not possible to make precisely the distinction between the fallacy in question (the *petitio principii*) and fair argument."—WHATELY'S *Logic*, pp. 142–3. Edit. 1826.

* Aristotle denies the necessity for any such proof; for he says that some propositions and principles are self-evident: and by these all other truths and principles must be proved. This is the foundation, and the groundwork of the fallacy of his whole system.

† Read LOCKE *On the Understanding*, B. iv. ch. 7.

sary to treat of them, and to show their emptiness, as if they had existed, since they have been so much talked of, and built upon.

For a single exception degrades the proposition below the class of a universal principle; and such an exception there always must be, so long as the conclusion itself is doubtful. The translation of Enoch affords an exception to the above-mentioned proposition, and reduces it below a general rule. And even without this exception, it could throw no light whatever upon the question of the death or translation of Moses, of Isaiah, of Prester John, of Melchizedec, of Ezra. But so long as these instances should remain questionable, the rule must be to all intents a doubtful one; and infinitely more light might be derived from addressing ourselves to the proofs of these particular instances themselves, if we would arrive at *certainly*, than from the use of any general rules or propositions. So that in effect, so far as argument is concerned, there is no such thing as a *certain* principle; and consequently, there is no possibility of arriving by such means at any *certain* proof.

The apparent exception afforded by mathematics, will require a separate and particular explanation.*

Every axiom, therefore, and proposition, as used in argument, is a limited proposition: affording only a collection of examples, or analogies; and being the ground only of probable proof.

We will now address ourselves, therefore, to the merits of syllogism, as affording a test of *probable*

* In the Sixth Chapter.

argument. It cannot, as has been shown, afford a legitimate ground for drawing a *certain* conclusion. It will presently appear to be equally impotent in estimating a *probable* one.

Every probable conclusion, drawn by virtue of syllogism, is of an equal degree of probability. It is a rule of logic with respect to conclusions and propositions, that they are of but two degrees of certainty: absolute certainty; and probability; — or, according to the language of the schools, they are in necessary or universal matter; or, in contingent or particular matter. Which last, comprising every thing that is below certainty, is undistinguished by any gradations; and is always expressed by the same indefinite form of *ᾧ, aliquis*: under which is comprehended necessarily, therefore, every amount in number, from few to very many; and every degree of probability, from bare possibility to almost absolute certainty.

Now, if it shall hereafter be made to appear, that the exact estimate of degrees of probability is of the very essence of judgment, and that the number of these degrees is infinite, it will be seen that logic, as hitherto studied, gives no instruction whatever respecting the proper province of reasoning. And least of all, can the use of syllogism give any aid towards fulfilling this object. For the instances contained under any proposition, and of which it is built up, afford, in effect, a mere ground of example or analogy, from which the probability of the conclusion may be estimated; the degrees of which analogy must be of infinite variety, according to the number, proximity,

and close resemblance of the examples. But these fine, delicate, and fugitive shades are all blended together and obliterated, by the stiff and formal framework of the rule which is requisite to qualify the proposition for its position in a syllogism.

The value of such probabilities can only be estimated, by enumerating and weighing the examples which lay the foundation for them. And such an enumeration and estimate the mind in fact makes, by a hasty survey, more or less perfectly: although the tongue omits it; otherwise, all the conclusions arrived at in argument would be of an equal degree of certainty.

It is evident that this discrimination is made by means of the discursive operation of the mind, and not by virtue of the mere form of the syllogism. For syllogism is, in effect, the mere form of argument; not the argument itself: the bare medium of communication, in reasoning, which is in common use, wrought up into an artificial system, and clothed in a formal and prepossessing dress.

But it is not by virtue of this form, that the mind is either instructed, or convinced. The greater part of the process is performed by the mind itself, playing upon the chord which the argument has awakened, and which the proposition has struck. There is no virtue in the form itself.

Syllogism, in short, is to the processes of reasoning, what language is to ideas. It is an imperfect instrument, used for the purpose of representing and communicating these processes rapidly and compendiously: suited to the very inferior power and rapidity of speech;

in which, general propositions stand for the multitude of instances, as general words for a number of ideas ; but by no means capable of unlocking other treasures than those which are within the mind already ; and in all cases, conveying and representing them very imperfectly.

But without burdening ourselves with the labour of analysis, it would have been sufficient proof of the futility of syllogism, and of the impotence of form as a test of argument, to show by example, that the very same form may be the vehicle both of true, and of false reasoning. That arguments also illogically constructed, and unreducible to the form of syllogism, may be perfectly convincing. This must, if any, be the true and proper test of the efficacy of form, and the criterion of its validity.

“ All men must necessarily be born of woman,” is an universal proposition : from which we syllogistically derive the conclusion, that Socrates was so born. And this is a true conclusion.

All men are born of woman : Alexander was a man : Alexander, therefore, was born of woman. This is true also.

All men are born of woman : Adam was a man : therefore Adam was born of a woman.

The above conclusions, estimated logically and syllogistically, rest exactly upon the same proof.

“ All birds are hatched from eggs :” the first bird, therefore, if there ever was one. But all eggs are produced by birds : the egg, therefore, that produced the first bird, by a bird prior to the first.

The value of any system is most fairly estimated

by the use and application made of it by its inventor. The above are the arguments used by Aristotle himself, to prove that the human race existed from eternity, and that the world never had a beginning.

On the other hand, the argument of St. Paul to the Romans, that, since the Jews are to be accounted as Gentiles, if they break the law, the Gentiles, if they keep it, shall have the privileges of Jews, is a convincing argument: though it utterly transgresses the rules of logic with respect to conversion; and is un-reducible to the form of a syllogism.

The following is certainly a valid argument, if there is any virtue in form; and if induction is truly said to be a kind of syllogism, a better illustration cannot be given of the foregoing reasoning.

A gentleman coming home at the usual hour, ordered up dinner. The servant said, "There is no dinner ready. You must know, sir, that you are ruined." "Go, I say, immediately," replied the master, "and fetch it up. My dinner has been ready at this very hour for the last twenty years: therefore it must be ready now."

But suppose it be objected, that the exceptions, in the instances that I have chosen of universal propositions, are miracles; and that the exception, therefore, since I am driven to such examples to disprove the force of syllogism, rather proves the rule—that the real form of the proposition is,—all men were born of woman—except the first. All birds were hatched from eggs except the first. And that these are true universal propositions. I answer, that I am driven to no such necessity. But that being only concerned to disprove

the efficacy of the *form*, in syllogism, these examples do this as effectually as any others; and that, by taking generally used and acknowledged propositions, which possess nevertheless, at the same time, well-admitted exceptions, the fallacy becomes more apparent: which might not have been acknowledged, if there were any disagreement as to the propositions or exceptions themselves. Besides, the above are arguments used by Aristotle himself; and are the most proper, therefore, to be used for testing and exemplifying the force of syllogistic reasoning.

But miracles are not necessary to furnish exceptions to universal propositions;—and even if they were so, they are one of the most important questions which have engaged us, and do engage us, in religious discussions. Suppose it were to be said, that fashion is irresistible with women; and that hoops have never been worn during the present century. This would afford no conclusive proof that any certain old gentleman did not wear a hoop in the year 1811; when all the rest of the world wore their dresses as tight as umbrella-cases. Without a miracle she might have been eccentric; or she might have chosen to wear her old clothes from economy, and to increase her charities; or she might have been bound by a will or by deed to do so, in order to retain an estate. Long wigs were worn by all men of rank at the end of the seventeenth century; and they were universally left off in the reign of George the Second. But this would afford no certain proof that such was the habit of a particular nobleman. Syllogism can afford no test even of the probability of these things. What certainty can it afford of the guilt

of a particular convict? Not more than one man in a thousand is convicted being innocent:—but this may be that very one. Murder is sure to come out;—but two or three still remain undiscovered. All drunkards are liars;—but before now there has been an honest drunkard. A confirmed drunkard is sure never to be cured;—but a few may have been. It is plain that syllogism can neither afford certainty, nor establish the degree of probability of the particular truth or fact, in any of these subjects.

“Be not angry without cause.” But syllogism cannot resolve whether this particular cause is sufficient or insufficient. “Answer not a fool according to his folly, lest thou also be like unto him.” “Answer a fool according to his folly, lest he be wise in his own conceit.” Syllogism cannot determine which of these precepts is applicable in each case. It can only say, perhaps this one may be the best; perhaps the other may be applicable in this case. And so it leaves it to be settled by what is, for this purpose, a superior instrument, namely, a toss of the dice. For that does settle it at least, which syllogism does not. No: these are moral subjects; and as such, far beyond the application of syllogistic reasoning. But they are introduced here only to show that miracles are not required to make exceptions to general propositions; and that the efficacy of the *form* in syllogism may be disproved even in these subjects; though it becomes more strikingly apparent in those instances.

That syllogism is not properly used as an instrument even in mathematics will be proved presently, by a true analysis of mathematical reasoning. And so

sylllogism will be driven out from its peculiar and only remaining stronghold. At present, I hope it must appear clearly, that the *form*, in syllogism, can of itself warrant no *certainty* in the subjects by which it has been exemplified; and that in subjects which do not admit of certainty, the power by which we estimate the degree of *probability*, must be of a higher order; requiring a much nicer, and more complicated, and more perfect instrument than syllogism.

CHAPTER V.

ANALYSIS OF REASONING.

HAVING once deposed and driven from its seat the idol Syllogism, it is no longer difficult to point out the nature and true character of reasoning. It is such as it must have at first sight presented itself to every one, in its natural dress and feature, before this cunningly wrought idol was set up; which, because it can be measured and marked out with a line, and squared and fitted by the rule and compasses, and suited, from its mechanical and material construction, to the obtuse taste and senses of science and philosophy, has been so inordinately worshipped.

Reasoning, for the most part, is the putting things in a new point of view. Such, for instance, as the analysis of syllogism, and the view of Bacon's logic, in the foregoing chapters. It is a leading of the attention and apprehension, by the suggestion of new subjects as bearing upon the question, or of new links between the ideas to be connected; or a placing of things which are already known in such a novel light and combination, as shall exhibit and place the subject in an improved position in the field of truth: in the same way as the motion of the earth is concluded, from a

comparison with the laws of the other planets, since otherwise it would not obey the laws of motion, and be an anomaly in the universe.

Thus, in the proof that we cannot perceive ourselves fall asleep : for that sleep is the loss of external perception : but when we lose perception we cannot perceive : we cannot, therefore, recognise the first moment of sleep, for at that very instant, we lose all perception,—here there is only the suggestion of a new arrangement of our previous knowledge ; which at once establishes the conclusion. When it is said that covetousness is idolatry :—when it is shown that to live in the hey-day of fashion, and to be habitually in the focus of observation, is to young women a species of prostitution : for that public exhibition has that effect among actresses, and is attributed as natural to them, —a new link is furnished between two ideas, which enlarges both of them :—in the latter example, by suggesting that female character is essentially of the mind, and is undermined by vanity, and tested by the blush ; and the two notions are seen to blend into one another.

These new links and combinations are wrought and provided out of our present fund of knowledge, and by recalling and presenting thoughts to the mind, which have been already treasured there. For when new facts, or truths, are enlisted into the argument, they must themselves be freshly made the subject of apprehension and proof.

New and simple ideas are gained by observation ; and are the materials of reasoning.

New facts are obtained by experience, and testi-

mony; and this last is weighed and estimated by judgment, and is the subject of reasoning.

New truths are supported by all the processes of the mind; and are essentially and properly the province of reasoning and judgment.

But the most proper fund and materials of reasoning, by which truth is elicited and established, are the present store and treasure of knowledge, and facts and notions which have been previously collected.

Nevertheless, ideas, and facts, and truths,—that is, ideas and notions which have been carelessly collected,—may all of them be made the subject of reasoning and debate, and reasoning of the very same kind; for they may be enlarged, corrected, and otherwise modified by the same methods, of presenting them in a new light: of supplying them, for the purpose of comparison, with new links: or of exhibiting them together with other subjects, under new forms and combinations.

Thus, the ideas of charity, and of Christian love, may be illustrated, by enumerating their proper offices; and by examples and parables: as of the Good Samaritan.

The fact of distance in any object may be demonstrated, by drawing attention to the character of its motion, and by pointing to the position of intervening objects. The fact that the seat of flavour is in the nose, by the holding a child's nose when you give him medicine.

All these proofs are effected by the same mode and process, as when one should endeavour to show the real existence of sibylline oracles by the Pollio of Virgil: for that a truth is there attributed to the sibyl, which

is not to be found in any other prophecy; or the reality of astrology, from the star which the Magian astrologers followed from the East. Or when we demonstrate the truth, that light has no gravity: for that gravity being only the effect of attraction, and attraction being greatest at the sun's surface, light in that case could never travel to us.

And since ideas, facts, and truths, are all subject to the same mode of reasoning, they need not for the purposes of logic be distinguished, or separately treated; neither the different kinds and forms of argument. For all arguments are of the same nature already described; and are alike subject to the same errors, and the same means of correction.

The process of reasoning likewise in our own minds, and in the pursuit of our private studies after wisdom and improvement, is of the same kind as that adopted in argument. As, when we convince ourselves that there is a special superintendence of Providence,—for that all things tend towards one end and design, but by ever new and specially adapted events. That the Holy Spirit exercises his influence in us: for that the self-same resolutions, under similar circumstances, are attended at different times with very different success, and this in proportion to our earnestness and faith in praying for it. In like manner, when we persuade ourselves by careful observation and comparisons, that system and classification are of the mould of man's mind, and not of the stamp and frame of nature:* that the vicious are, to us at least, the subject

* See Book II. Part 2. Laws of Nature, Sect. 9.

of sorrow, not of censure, — all these reasonings and operations are performed by the self-same processes, of bringing our thoughts and experiences together under new combinations, and of setting them in a truer and more perfect light.

Whenever the same view of a subject is entertained, and of all the parts of a process of reasoning, there is then infallibly the same conclusion; without any regard to the form of argument, or the merits of the arrangement.

In the above proof from the *Pollio* of Virgil, if all are agreed that the fifth line of the *Eclogue* is prophetic of the new mode of computation by the Christian era,* the conclusion required will probably be conceded. In the conclusion for the Providence of God, if it is agreed that the instruments in operation are constantly tending to the same end, and yet are themselves continually varying, the result will be agreed also. This will mostly be conceded by those who devote themselves to the study of the religious and moral world, and denied by those who give their whole attention to material and external nature. These, and all other conclusions, are agreed by virtue of the entire agreement in the view of the whole subject; not by virtue of any form or arrangement in the argument.

For this reason it is, that truth very often need only be stated in its proper light, to be recognised and acknowledged; as in the proof that Moses believed in the Resurrection: that is, that all good men live unto God: from his mention of the God of Abraham.

* “Magnus ab integro sæclorum nascitur ordo.”

And so in the mere assertion, that prostitution is of the mind and character ; that adultery is of the heart.

Dispute, therefore, and difference of opinion, arise wholly from seeing things in an opposite light ; and from entertaining a different view and apprehension of the truth and intention of the premisses. As, in applying the prophecies, "The sun shall be darkened," and "The stars shall fall from heaven," the question is whether they are literal or figurative. As, in our debate and controversy with the Roman Church, it is respecting the intention of certain texts, such as "This is my Body ;" "I will give unto thee the keys of the kingdom of heaven." Or with the learned Jewish interpreter in the Mischna, who proves that Adam's body was composed of dust taken from every part of the earth : for that, "Thine eyes did see my substance yet being imperfect ;" and, "The eyes of the Lord are over all the earth."

False reasoning, therefore, also arises from misapprehension. For it consists in supplying deficient or imperfect links, from a misconception as to their relation and sufficiency ; and in affording such illustrations as give only a partial view, and draw the subject out of its real position. Confutation of error, on the other hand, is the providing better and more apt illustrations ; the detaching those links which are ill connected ; and repairing such as are weak and imperfect.

Payne argues, that government by hereditary succession, is in its nature an absurdity : because it is impossible to make wisdom hereditary. In which reasoning the natural talent and genius of the monarch is magnified into the object of sole importance ; but the

force of education is entirely neglected ; and all the difficulties and evils of election are together disregarded. The subject, therefore, is exhibited but in one point of view, and drawn out of its true position by the mere force of omission, and pointed statement.

An apothecary prescribed an egg to his patient, by way of diet, but forbade him to eat chicken. "Do you consider," asked the patient, "that chicken is less digestible than an egg?" "Why," replied the apothecary, "the egg, you know, is 'the origin' of the chicken."

Difference of opinion continues to be entertained, so long as the subject cannot be brought to be regarded in the same point of view,—which is the case, when the train of reasoning is too difficult to be apprehended ; or when the links which seem to one person complete, appear to another to be imperfect ; or when the different points bearing upon the question, and brought together into combination, are not seen to have such a real connexion and relation as to warrant the conclusion.

From all the above examples, then, it appears, that the proper province of reasoning and judgment, is the region beyond ordinary and distinct vision. It is all that lies beyond that limit and boundary in the landscape of knowledge, to which the external or intellectual eye of every person can distinctly reach with clear and accurate perception. No one doubts, therefore, or attempts to prove that the sun is more distant from us than the clouds ; nor that flavours are tasted by putting them into the mouth ; nor that verse is musical from the difference in syllables. But whether

the sun or stars are the more distant ; or whether the seat of flavour is in the mouth or in the nose ; or what is the nature of accent and prosody in English metre, which, for the mere want of sufficient nicety in the sense of hearing, is still undetermined : — these afford subjects for debate and reasoning. Or if it is a subject for the testimony of others, the weight of this must be estimated. All these are questions beyond our actual knowledge ; and the limits of distinct perception ; or of experience.

There are some questions, however, which are at the first doubtful, but which may, by reasoning, be rendered certain, and distinct to the apprehension. Such are, for instance, that the sense of flavour is seated in the nose ; that light is without weight ; that the stars are more distant than the sun ; and so in general of mathematical problems. These may be made to be no longer the subject of doubt. And then there remains no further exercise for the judgment.

The offices of logic, arising out of the above analysis, are twofold. To render the apprehension clear and accurate, and extend, if possible, the field of vision ; and to assist the mind in drawing just conclusions, when the apprehension still remains imperfect. The first consists in giving aid to the Apprehension ; the second is the province of Judgment.

CHAPTER VI.

MATHEMATICAL REASONING.

MATHEMATICAL demonstration is of exactly the same kind as all other reasoning, except in the subject of it; but this difference in the subject-matter entirely distinguishes it from every other kind of argument.

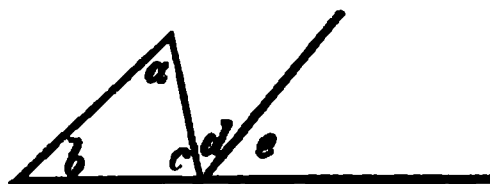
It consists, like all other reasoning, in the bringing of the thoughts and treasures of the mind together into a new combination; and the leading them into a new channel; by the suggestion of steps and new links to the apprehension, which exhibit a connexion which it had not before noticed.

The only peculiarity of method in mathematical reasoning is, that it expresses every necessary link in the demonstration, without suffering one single step, on account of its obviousness and simplicity, to be hurried over or omitted. And the study and practice of the logic of mathematics is principally useful as giving this accurate and laborious habit to the mind; and that peculiar mental skill and legerdemain which is acquired by the use of it. In morals, however, all the multitude and variety of links and features in the reasoning cannot be expressed; nor the subjects of it, therefore, brought so clearly before the mental vision,

and made so distinct and certain to the apprehension, as to leave no room for the exercise of *judgment*: which is excluded from mathematics.

The example before given, in the proof, that light is devoid of gravity, is as nearly as possible a mathematical theorem; the proof of which is performed by identifying weight with attraction, and the effect of weight with the effect of attraction (already known) at the very centre of force, — whence we know that light originally proceeds.

So in that most simple and beautiful demonstration, in the First Book of EUCLID, that the three angles of a triangle are equal to two right angles: two angles, A and B, are identified with other two, D and E, (for



reasons already known,) which, together with the third angle c, are known to constitute two right angles. This proof, it is evident, is of the same kind with the last; and with all the rest of the examples given in the preceding chapter.

What is it, then, that constitutes the essential difference between mathematical and moral reasoning? and for what reason have the mathematical sciences been pursued so much further, and with so much greater success and satisfaction, than all other subjects?

Mathematics have been pursued to so great and anomalous an extent, from the extreme and anomalous simplicity of their subject. Is it equally easy

to measure an acre of land, and to circumscribe the character? Is it as easy to measure the flight of thought, and the motion of the Holy Spirit, as either of these? Yet these last are the subjects of truth and knowledge, and of moral and religious reasoning.

The most complicated and abstruse mathematical problem, is scarcely so complex as the most simple moral proposition. And this arises wholly and entirely from the very opposite nature of their respective subjects. The object of the one is truth, and reality; of the other, an idea only. The subject of the one, is the mind, the motives, the mysterious, mighty, enigmatic, the inward, intellectual man. Of the other, the material, the senseless, the outward frame of nature: the helpless tool and instrument which we use: the stage we tread on.

The subjects of pure mathematics are not worthy of the name of truth,—which they have usurped exclusively. Its subjects, themselves, are mere fictions and semblances: a mere simple “idea:” secure only in their unreality:—being certain consequences flowing from certain supposed abstract conditions, abstracted from all attendant circumstances and difficulties. The highest and most highly wrought conclusion of mathematical science, is but an approximation to the reality even of external nature. Its only complete success has been in the science of those things which are totally beyond the sphere of human action; which are linked to us primarily and chiefly by curiosity: secondarily by their use. In mixed mathematics,—in mechanics, hydraulics, projectiles, and other practical sciences, it makes only an approximation to reality and fact.

Geometry and algebra treat only the most simple possible cases of the simplest properties of matter; namely, the simplest kind of figure, and the simplest of proportions:—magnitude, and number.

The first step in mathematics,—which is definition,—is the finding and determining a certain property,—as superficies,—triangle,—inherent in the simplest possible supposed object. And the rest, the finding of other properties and consequences attendant upon this idea. This object, itself, nowhere exists in the simple and perfect form conceived; but the idea only, apart from matter or any real substance, is all that is made use of.

Now, the peculiarity of every mathematical idea is, that it is expressly and individually *one idea*. Everything that comes under the same definition is the same idea; or, in other words, each definition includes only one identical and individual idea. Though derived from many objects in Nature, and used variously, the idea of a triangle, or of a circle, is as expressly one and the same in all cases, as, in arithmetic, the number 1, 2, or 3; or the formula $x + y$ in algebra,—the abstract representative of numbers, which are themselves an abstraction. The result is, that the triangle, or circle, or equilateral triangle, is the same individual circle or triangle wherever it is used: so that the citing of a previous proposition, is only the reminding us that the figure now under examination is the same figure of which certain properties were before shown; that is, the very same figure or idea at first limited by the definition of it, with its definition, or the description of its properties and relations, enlarged.

The process is exactly the same as this in the use of the axioms, which may all themselves be proved: being universal properties of simple space, or magnitude, without reference to any particular figure; and immediately derivable from the definitions of equality and proportion, if these were to be given.*

The idea, then, of magnitude, is one idea, distinct from figure, from which it is abstracted: being an abstraction from an abstraction. So the idea, triangle, is distinct from that of an equilateral, or isosceles triangle: of an angle, from that of an acute, or right angle. And each is itself one individual uniform idea; being the very same wherever it is used.

Whenever a known property of a simple idea is cited as applicable to another idea which is more complicated, and which contains the simpler one,—as of a triangle as applicable to an isosceles,—it is cited only as applicable to that idea which it contains under it, and which makes a part of itself; and not as of a general idea, containing many individuals under it. For, according to a true analysis, it is the complex idea which contains the simple one, not the simple one which contains the complex. The contrary notion has arisen from the mistake made by the early philosophers, of supposing that abstract ideas represented real substances; whereas they are mere ideas, and represent nothing but themselves.

It should be remarked, also, that the figures and diagrams employed in geometrical demonstrations, are

* The truth of this assertion will be shown presently.

only the mere substitutes and representatives of ideas ; and not the ideas the representatives of them.

It is seen, then, how ideas differ from substances and reality ; and how mathematical ideas, the mere figments of the mind, are each individually one.

It is this circumstance, which,—since by the rules of logic an individual may be used as an universal,—renders mathematical reasoning reducible to the form of universal syllogism. But it is evident, at the same time, that it is wholly unnecessary, and does not in any the least degree assist the reasoning. The true analysis, as has been seen above, is of a much simpler kind ; and it is only the common forms of expression,—“ *every*” circle,—“ *a*” triangle,—which have arisen from the vagueness and inaccuracy of our perception, not readily distinguishing that it is the same idea which is to be found in many more complex ones, and not many ideas which come under one definition,—which has occasioned the adoption and currency of the opinion as to the applicability of syllogism.

It is sufficiently remarkable, however, that mathematical proof,—the simplest of all possible kinds of reasoning, and the stronghold of the logicians,—is not itself reducible to the strict form of syllogism ; but only by a distant and figurative approximation. For every mathematical syllogism would have four terms in it, instead of three : namely, the two terms which are compared, the term of comparison, and the term of equality or proportion ;—for the substitution of the term “ *greater*,” or “ *equal to*,” for the only legitimate logical link or copula “ *is*,” at once removes it beyond the application and principles of logic. For, so far as the

rules of logical conversion are concerned, it does not at all follow that because one quantity is greater than another, that other is less : any more than that because Philip is Alexander's father, Alexander must necessarily be Philip's son. These things are completely and entirely beyond the sphere and comprehension of syllogistic logic.

But if to some one it cannot be made apparent that mathematical ideas are strictly one, and individual, we must then assume a new and different ground; and show, by another process, the wide distinction between mathematical and moral science; and the total inapplicability of the strictness of the one kind of reasoning to the subjects of the other.

The above proof, that the three angles of a triangle are equal to two right angles, depends upon the previous demonstration, that if a straight line cut two parallel straight lines, it makes the alternate angles equal. But how was this proved? It was proved, say you, once for all. Yes, truly, it was proved in one solitary instance. And it is denied that the subject of the proof was one individual idea. How, then, is it to be determined of all the rest? Nay, but it was proved of all cases at once: which the single figure represented. The fact is,—such a form of proof was given as to be equally applicable to all instances: supposing them to be various. That is, a “*form*” of demonstration was provided, which, though used only upon one, is equally applicable, even to the very word and the very letter, to every possible case and instance, supposing them to be many, coming under the same idea and definition. In other words, the subject of this,

and of every other mathematical demonstration, is found to be the subject of formulary notation and proof. This is notoriously and palpably the case in geometrical demonstrations; and it is still more obviously so in algebra, which is the more abstract, and the sister branch: this capacity arising from the extreme strictness and simplicity of the ideas, (and in truth their individuality,) and their capability of exact and accurate definition.

It is the same in the proofs which are founded upon axioms. In these, also, the reference is only to certain forms of proof generally applicable: or, to a proof once made of some property of the one simple, individual idea, of space, or magnitude. For all the axioms may be proved in the same way as propositions, upon the mere foundation of the definitions of equality and proportion.*

* The axioms may be proved in some such way as the following:—

The Eighth Axiom, in SIMPSON'S *Euclid*, is not really an axiom, but a definition of equality; and should have preceded all the rest. We shall, however, prefer the following definition:—Magnitudes which will fill exactly the same place, are equal to one another.

And here it must be premised, that geometers, though by far the most exact of all reasoners in their ideas and expressions, have not been sufficiently accurate in distinguishing, that "magnitude" is the only proper subject of their science: according to which, they should have excluded the term "*things*," and substituted that of "*magnitudes*" in their axioms of equality.

The grand vizier, by the constitution of the Ottoman empire, is equal to the grand mufti; but there might be found a strange discrepancy in point of equality between them, if they were to be

If, then, the axioms in mathematics can be proved, as well as the propositions, upon the sole ground of definitions: that is, such formulæ can be given that every case of the same kind may be brought, not only under the same form of proof, but under the same form of words: the peculiar strength of geometrical and algebraic demonstration, and their reduction to the form of syllogism, will be seen (even by those to

measured by diameter and circumference, or weighed together in a balance. All ideas and subjects, except that of magnitude, should be excluded by the very terms of the axiom.

To prove, then, by the above definition, the First Axiom, that magnitudes which are equal to the same magnitude, are equal to one another,—let the third term, which is the term of comparison, be supposed to be removed, and one of the others substituted for it; it will fill the same place: by the definition. Let this be removed, and the other substituted; it will also fill the same place: for the like reason. But they have also filled the same place with one another; therefore they are equal.

Axiom II. If equal magnitudes be added to equal magnitudes, the wholes are equal.

Let one equal be added to one magnitude, and the place occupied by them defined or imagined. Let the added magnitude be removed, and its equal substituted. Let the first magnitude be removed, and its equal substituted. The place occupied by each whole has been the same. Therefore the whole magnitudes are equal.

The other Axioms, to the Seventh, are proveable, of course, by the same process. The Ninth Axiom should be proved upon a definition of greater and less: some such as this:—

Definition. If to one of two equal magnitudes something be added, that which is added to is said to be greater; and the other less. If from one of two equal magnitudes something be subtracted, that from which the subtraction has been made is said to be less; and the other greater. Or,

If to render two magnitudes equal, (that is, make them fill

whom the individuality of their subjects is not apparent) to depend upon the characteristic simplicity of their features, which renders them reducible to formulary notation.

Do other subjects, then, admit of similar forms? Clearly not. Other subjects do not admit of formulary proof, nor, consequently, of strict demonstration,—because they are incapable of accurate definition. This

the same place,) it be required to add something to one of them: that which requires the addition is said to be the less, and the other the greater. And if to make two magnitudes equal, it be required to subtract something from one of them, &c. Or,

Of two unequal magnitudes, that which requires addition to make it equal, is called the less: and that which requires subtraction, the greater.

The meaning of a whole, and of a part, should also be defined. So likewise it should be defined or proved, that the whole is equal to all its parts.

To prove then the Ninth Axiom:—

If one or more parts be taken from all the parts, which are together equal to the whole, by definition; the remaining part, or parts, are less than the whole: by definition. Or,

Suppose a-part to be equal to the whole: add the other parts; then, by definition, all the parts are greater than the whole. But, by definition, they are equal. Therefore, &c.

Axiom X. That two straight lines cannot enclose space, must evidently be proved.

So also must the Eleventh, That all right angles are equal.

The only possible form for the Twelfth Axiom, is either the definition of parallel lines in BONNYCASTLE'S *Euclid*; or the following:—

That two straight lines are said to be parallel to one another, when the sums of the interior angles on each side of a straight line cutting them, are equal.

All these, it is to be observed, are not merely possible and fictitious proofs; but they are such as the mind actually goes through within itself, every time, in assenting to the axioms.

incapacity of moral subjects for strict definition will be shown at a future period. At present, we shall exhibit only by an example the great difference which subsists between the two kinds of subjects.

When we say, in the form of an universal syllogism, that every one who thinks and acts differently from the fashion of the world, is esteemed ridiculous : every one who thinks and acts rightly, and according to the precepts of real wisdom, thinks and acts differently from the fashion of the world : that every one, therefore, who thinks and acts rightly, and with strict wisdom, is ridiculous, — we at once find ourselves very far launched beyond the subjects and province of formulary notation.

When we say, in like manner, that every machine has a contriver : that man is a machine : that man, therefore, must have had a contriver ; though we appear to make a somewhat nearer approach, we still find ourselves far beyond the limits of mere formulary expression.

The idea, “machine,” is no longer one single uniform idea, the same in all its subjects ; or if it were so, it is so far removed and abstracted from the subjects which it comprises and represents, that it has scarcely any longer any agreement with them. No formulary proof, therefore, that was applicable to one, will be so obviously applicable to another, as by the mere force of the terms to carry conviction with it. The many accompaniments, and the numerous steps between the idea and the reality, must be such as to give ample room for doubts and misapprehension. In no case is it likely to be the same idea exactly which

passes in any two minds under the same expression ; since it is the representative of the objects of their different experience.

But the force of mathematical proof and notation is the actual identity, or at least the exact uniformity, of the ideas which are the subjects of definition, and of the demonstration. Such ideas may be definitely and sufficiently expressed in words, without fear of mistake, or of difference of interpretation. But the ambiguity of language is totally incapable of expressing definitely the subjects of moral science, so that truth shall consist in, or spring out of the form and force of language, and the words themselves.

In an example before given, the extreme latitude was observed, which might be attributed to the simple term, equality. In like manner, when Seneca says, that the reward of virtue is immortal glory, and so also does the Christian teacher,—they agree together exactly in terms ; but they are as opposite as heaven and earth from one another in meaning, and could not reason together.

Except for this difference in the nature of its subjects, when applied to men and to mechanical contrivances, the use of the premiss, “machines must have been invented,” is similar to the use of a mathematical axiom. For mathematical, as before observed, is the same as moral reasoning, except in its subject matter;—but this difference totally distinguishes them.

The reference made to the above axiom, then, is a referring only to that “form” of proof, or course of observation, by which the mind has gathered the

knowledge that certain machines have had contrivers. And if the same course is applicable to this case which is in question,—well! But if it be not at all applicable, or not without some variation, the result is not conclusive, and there is much room for doubt, mistake, and deception.

If the idea, “machine,” were a simple one, and throughout all the subjects of reasoning the same, as of a “triangle,” a “circle,” whatever reasoning was applicable to it, and conclusive in one case, it would be equally applicable and conclusive in every other. The idea, “circle,” however, is neither immediately taken from, nor is the conclusion respecting it immediately applied to any real subject; for there is not an object in nature which is a perfect circle, and to which the conclusion, therefore, which is only respecting a perfect circle, is really applicable. The subject in this case, and so in the whole field of mathematical disquisition, was from the first, and still remains, only and nothing but *an idea*. And therefore it is, that it admits of exact individuality and uniformity.

But in the moral subject above instanced, the ideas, the subjects of the proof or reasoning, are taken immediately, and at the time, from real subjects; and to such also the conclusion which is drawn from them is immediately applied. But all these realities are distinguished, and differ widely among themselves; so that, in the application and use of the idea, it must be subject to an infinity of accompaniments, and changes, and combinations, which must render the adaptation of the form and process extremely questionable.

It is this individuality, then, and uniformity of

ideas, which gives to mathematical sciences the certainty which they possess. It is the same simplicity and exactness which has caused mathematics to be pursued, to appearance, so much further than all other sciences. But the subjects of its speculation not really existing, nor even representing correctly what has any actual existence, even in the material creation, its conclusions have, till lately, been little reduced, or made applicable to nature : though more frequently to art.*

—Mathematics, however, having been pursued during many ages, without any actual foundation in nature and reality, Newton and others discovered at length a few cases in nature, which hit pretty exactly one or two of the infinity of cases, of which mathematics investigates and discovers the properties. What was true of the supposed case, was true also of the reality.

How simple are these cases ! Compare one of them with a case in moral science.

First, regard the earth and sun as two individuals acting upon one another. Consider them as actuated, each of them, by one single passion or disposition, the force of gravity ; and by one moving principle or life. Their motions, and operations on one another, are simple, and exactly definable.

Add to these the influences of the other planets and satellites, operating under the influence of the same principle or passion : how complicated and difficult become the motions of a score of individuals,

* Euclid is said to have written all the books of his *Elements*, solely in order to discover the properties of the five regular solids.

operated upon and actuated by one single affection ! Even supposing but the three individuals, the sun, moon, and earth, the same relative situation and circumstances would not recur exactly within hundreds of years.

What, then, can be penetrated or defined for certain in human affairs ; where innumerable individuals act together, actuated by innumerable and undefinable passions, under infinite degrees and combinations, and under a multitude of different circumstances : respecting all which our experience is to be gathered and acted upon by ourselves, in about threescore years ?

It is easy to build up figures into the dimensions of the national debt ; and to dispose numbers into logarithms and the most complicated equations and proportions, without an error in the result. But we cannot equate passions and motives. But we cannot define and dispose human impulses and affections to the performance of one certain action.—We cannot dispose a certain number of actions into the formation of a disposition ;—a certain set of dispositions into that of a fixed and definite character. We cannot from a knowledge of thoughts and motives determine the orbit of one mind :—from this, the co-operation of two or more minds :—from this the co-operation of many minds,—of a family, of a society, of a multitude. When we import the element “life” into the equation, how vastly great is the difference and distance ! When we import “mind” and “will,” where is the calculation and formula that can follow it ?

“ Two clouds before the summer gale
 In equal race fleet o'er the sky ;
 Two flowers, when wintry blasts prevail,
 Together pine, together die :

But two capricious human hearts—
 No sage's rod can track their ways,
 No eye survey their lawless starts,
 Along their wild self-chosen ways.”

We can no more prove the truths of religion, and the duties and interests of life, by mathematical demonstration, than we can weigh them in a balance, or mete them by the bushel, or mark them out, and define and circumscribe them, by the rule and compasses. Yet these last are of the nature of the subjects and operations, and the very highest and ultimate conclusions, of mathematical reasoning.

CHAPTER VII.

ANALYSIS OF REASONING, CONTINUED.—THE PROVINCE
OF APPREHENSION AND JUDGMENT.

THE term “reasoning” comprises in itself the whole business of logic: namely, that which suggests, and that which apprehends, and that which judges, in all those subjects which submit themselves to human study and investigation.

We have hitherto occupied ourselves chiefly with the first of these offices, which is the discursive or demonstrative part: being that which furnishes reasons and arguments; and constitutes the business of the teacher or demonstrator: supposing two persons to be engaged separately, the one in proving, and the other in weighing, the proof of a proposition.

These separate offices are exercised more or less distinctly in every conversation: though, in most disputes and arguments, it must be confessed, that both parties are usually occupied in proving two contrary opinions; and neither, in listening to or weighing the truth of the other’s propositions.

Now, in reasoning with ourselves, and in our silent meditations, we perform all these offices within our own minds; though they are so blended and inter-

woven with one another in time and in operation, as to constitute in appearance one single process. Nevertheless, we are continually informing ourselves, either by memory or observation, of new notions; and by a separate operation, though performed at the same time, weighing the value of these new suggestions, or combinations.

It is evident that all reasoning and just argument is attended with improvement; and is concurrent, if not identified in operation, with the advancement of knowledge. That books, too, for the most part, hold the place and office of the discoverer, or demonstrator, is an argument.

The two other departments in reasoning, then, besides this, the discursive one, are Apprehension, and Judgment;* which constitute the office of the person instructed, either by himself or others. And these alone are really and expressly the subject of logic; which is employed in sifting and digesting the suggestions of books, of theory and observation,—the inventions of our own minds, and of the minds of others.

Now, whenever apprehension can be made distinct and perfect in all the parts of a subject, it is the sufficient end; and then there is no room for the exercise of judgment. This may be done, in a great measure, in physical, and in all mathematical sciences. But the science of man is not capable of any such exactitude; nor can the subjects of it in any case be

* “Reason is only Perception and Judgment.”—*Tatham's Bampton Lecture: The Chart and Scale of Truth*, Lect. II. p. 48.

brought so clearly before the apprehension, as not to require the exercise in some measure of doubt and discretion. There are, however, all stages and degrees of certainty, and distinctness of apprehension, between that of the equality of all right angles, and that, for instance, of the true nature of the summum bonum. In all these stages, apprehension holds the primary position, and performs the first part ; and the further it is able to advance towards distinctness and certainty, the less need it has of foreign assistance, and the employment of a substitute.

But where its power and empire ceases in each subject, there the province of judgment begins ; and all the place which apprehension leaves unoccupied, and all the part which it fails to perform, is filled up by this third operation of reasoning : whose office, in all the higher and more useful branches of science, is the most important of all.

Now apprehension may be, in some measure, improved and assisted, and its dominion extended ; and some instructions may be given for the use and application of it. But much more may be done for the advancement of truth, by pointing out its true nature, and defining its limits ; in order that no greater task may be attributed to it than it is competent to execute ; and that the exact boundary at which judgment commences may be known, and the full necessity and extent of its operation be recognised and appreciated. For their offices being exercised at the same time, and intimately blended together, in every the minutest part of reasoning, this becomes a matter of much nicety, and of considerable difficulty. And if any part in

reasoning is attributed wholly to the apprehension, which requires the assistance of the judgment, the result will be a greater degree of certainty than belongs to the subject. Whereas judgment, which is exercised wholly in things probable, is the powerful instrument which is applicable in the affairs of human life, and in questions of a moral character.

The subject of both these branches of logic is seated in a region, to which the empire of logic has hitherto scarcely been supposed to extend.

Since both true and false conclusions may be derived from the same process of syllogistic reasoning:—as in the examples before given, of all men being born of woman, and all men being mortal, which are applicable to the whole human race in general, only with certain exceptions:—it is evident that there must be some higher kind of proposition, or operation in the mind, beyond the major premiss, which must determine this application, and the use of the major premiss itself. And in this operation and application lies the seat of truth, and the real office of logic.

This office, which determines the precise value and applicability of the examples contained within the proposition, is performed, in the first place, by the apprehension. And if the apprehension could set all these examples and instances before itself clearly and distinctly, and see the exact relation which they bear to the subject in question: as may be done in mathematics: its decisions would be sufficient and final; and there would be no need of the exercise of judgment.

But since this cannot be done in any subject of

human action fully and completely, judgment of necessity offers its assistance ; and aids it, by determining the probable weight and applicability of the experience.

That experience is the sole foundation of reasoning, and that induction and syllogism, or, in other words, argument by examples and by general propositions, are of the same kind, is sufficiently evident ; since it has been shown that there is no such thing as an universal syllogism : at least in moral subjects ; and particular propositions are only a compendious method of expressing analogies.

Analogy and example, it is to be observed also, are evidences of the same kind with one another, in moral science : no two subjects or individuals being without some peculiar qualities, distinguishing and separating them more or less widely. The comparison, therefore, of one man with another, is an analogy, the same as the comparison of men with the animal or vegetable creation : differing only from these last in the degree of relation and proximity.

Apprehension, then, holds the first place, and performs the first part, in determining the value of these relations, and the application of our experience. Its weakness, however, and incompetence, exhibit themselves at first sight, in almost every case.

All the task which it leaves uncompleted, is, as we before said, undertaken by judgment ; which, occupying itself with all that is beyond the province of certainty and distinct vision, is wholly exercised upon that which is probable.

Its office, for example, is to determine the proba-

bility which is afforded by one or more examples in each class of subjects ; and the amount of additional evidence which is wanting, according to the degree of difficulty of the subject, and the distance of the analogies.

A single experiment in chemistry might go further than two or three examples in anatomy. Two or three in anatomy, than ten in medicine. Ten in medicine, than twenty in geology. A still greater number might be required to establish a rule in physiognomy : such as, that all fish are coarse or delicate, in proportion to the size of their scales.* Ethics and politics would require a still wider range of experience and evidences. What is the amount of testimony that is sufficient to prove the existence of ghosts ? This will appear different to each person, according to his judgment of the general laws of God, and of nature. Are the examples sufficient to warrant the conclusion, that Rome under a Sextus will always be unfortunate ?†

* The science of physiognomy embraces a much wider field than is now generally comprehended within it. Aristotle's treatise on Physiognomy, which embraces all the evidences of internal qualities afforded by outward appearances, is a book of real science, and infinitely superior to any of the modern treatises bearing that title.

† The last line of the following epigram, written upon Alexander VI., was applied to Pius VI., immediately upon his elevation to the pontifical chair :

Vendit Alexander Claves, Altaria, Christum ;
 Emerat ille prius, vendere jure potest.
 De vitio in vitium, de flammâ transit in ignem ;
 Roma sub Hispano deperit imperio.
 Sextus Tarquinius, Sextus Nero, Sextus et Iste,
 Semper sub Sextis perdita Roma fuit.

How many coincidences would establish a probability, that a full moon at midnight will bring favourable weather? How many, that a full moon on a Saturday and a new moon on a Sunday, are a sure sign of a rainy season?

It is the province of judgment to make these estimates; and comparing the weight of evidence with the nature of the subject, to extract the probability.

Mathematics, looked upon in one point of view, may be considered merely as occupying the highest station in this scale; and as admitting of the highest degree of probability, which is absolute certainty, from a single example. Under this view, also, it affords no ground for the exercise of judgment; and does not, therefore, come in any way within the pale of our subject.

Again, since twenty years of repetition and experience may not be sufficient to establish a certain rule as to the punctual arrival of a dinner, under an alteration of circumstances, it is a principal business of judgment to determine, not only what is sufficient to constitute a rule in each subject, but also what case or circumstances are such as to warrant an exception.

The sun will certainly set to-morrow evening:—yet not without reference to the cause which orders it; any more than the arrival of a dinner, or of a coach. And if the reason for the exception, or the miracle, is sufficient to outweigh the cause, or to warrant a deviation from the rule, there is no more wonder in the sun standing still, than in the non-arrival of a meal, because a man has been ruined. We are as ignorant of

the counsels which direct the course of the heavens, as the gentleman was of the means which furnished him with his luxuries; and an occasion may, in the one case as in the other, be sufficient to warrant an alteration.

For this reason, our experience does not at all affect the question, as to the beginning or the end of the world; and we must look to other sources and principles for information, and the grounds of belief. The Jews said, We “know” this man, whence He is:—and so they did,—with a knowledge sufficient upon any less important occasion. But the subject was one which was sufficient to warrant an unprecedented event, namely, that of a birth by a miraculous conception:—and it was their duty to have inquired further.

This is the question for decision in all miracles.

Now these questions, and decisions such as these, are beyond the reach of simple apprehension; and these are, therefore, of the express office and department of judgment.

Judgment, moreover, estimates the value of arguments *a priori*. But these are still, and so equally with those of every other kind, founded upon experience; and differ only in being built upon more distant and indistinct analogies.

There seem, however, to be exceptions to the conclusion, that all arguments are founded upon experience, and that general propositions and syllogisms are merely the dress with which we clothe inductions and analogies; which are to be found in those principles, such as the rules of law, which are founded upon authority. But law, and compulsion, are not of

the province of truth, nor the real subject of logic. They afford an express exception in the field of knowledge and investigation ; and do not submit themselves in principle to the scrutiny and tests of truth. Arguments upon such express rules can be merely verbal, and respecting the meaning and extent of the command.

Yet the policy of laws, and their interpretation, their application, and all that is connected with the practical efficacy and use of them, even the meanings of words, are subjects, in which experience, and example, and analogy, are aids and instruments essentially necessary ; and law, therefore, becomes in this view one of the most important subjects and theatres for the exercise of logic : and the more so, as it is the science the most advanced, and most constantly reduced to practice of any in existence. Though it does not, because its original enactments are arbitrary, furnish the subject of real truth,—which is the interpretation of nature, moral and material, and of the universe itself ; yet it presents itself as a kind of figurative and fictitious universe, which requires a peculiar study and interpretation, and a peculiar logic, therefore, of its own.

This system, indeed, since it has its foundation in reason, and policy, and wisdom, is intimately connected in its origin with the science of man, and the study of human nature ; yet this consideration is less useful to the lawyer than to the legislator. The policy and reasons of many enactments are so distant and unfathomable, and many things are necessarily, at least to all appearance, so arbitrary and artificial, while at

the same time all the parts of the system must agree together, and the whole be made to be uniform and consistent, that it becomes of necessity, for all practical purposes, a study, a system, and a universe of itself.*

In like manner, all other command and authority, to which we voluntarily submit ourselves with an implicit obedience,—as fashion, rules of taste and criticism, mathematical definitions, &c.,—are not of the nature and real substance of truth, nor the proper province of logic.

* Nevertheless, decisions of law being for the most part of points hitherto undetermined, these are in a great measure reasoned upon and deduced by analogy; and thus arguments of law come to be very much of the same nature as all other arguments.

CHAPTER VIII.

ANALYSIS OF TRUTH.

TRUTH is all that is the subject of right judgment. Under moral truth is included all that is right, just, wise, and politic, in opinion, and action, and in the business and conduct of life.

Now, one of the first and most important features of the truth we speak of, is, that it is always a fine and narrow line; being confined within strict and very precise limits. Truth will not admit of the slightest deviation or latitude, without merging into falsehood; nay, even the smallest, and apparently the most trifling differences, are often sufficient to place us in the most absolute state of error: differences, perhaps, imperceptible to any but the apprehension of a master; and undistinguishable by the ordinary niceties and gradations of the instrument, language.

The three opposite doctrines, for instance, of a disposing Providence, of fate, and of chance, all agree in the same fundamental principle, that there is a Power above our control. And the difference lies wholly in the acknowledgment of the source and direction of this Power: a point which entirely eludes the observation of a great portion of mankind.

It is idolatrous to frame for ourselves a model of the attributes of God from any sublunary being, even from the character of man : which all nations have done, which all nations of the earth now do : as witness those who think that God must feel it beneath Him to regard with attention the meanest of reptiles, or us insignificant mortals :—yet God is made known to us, and revealed from heaven, in the form and fashion of a man. The difference is, that He was such a man, and such a model and pattern, as men could not have formed an idea of from the contemplation of themselves, or of any sublunary created being : a character such as no earthly man or creature in existence can even fully comprehend.

The moral doctrine of our Lord was mostly compiled from, and expressed by, precepts and proverbs which had been before delivered.* Yet it differed from all others as noon from twilight, through the mere force of its character and complexion. Itself was perfect ; and it prescribed perfection. And now, at this present era, though continually read, it is so little understood, because it is so imperfectly practised, that if the doctrines and systems which preceded it were placed by its side, in their best shape and colouring, very many men could not perceive the difference : as was actually professed by a certain class of philosophers in the last generation.

Thus it is, also, in true wisdom and greatness of character. The perfections of it are scarcely distin-

* Matt. xiii. 52.

guishable from vices, and easily merge into them. Fortitude carries the appearance of insensibility : firmness, of self-opinion and obstinacy : disregard of the opinion of the world is nearly allied to pride and contempt : composure and self-possession to inaction : caution to timidity.

The easy and almost imperceptible transition from truth to error, and the force of a very slight exaggeration or misstatement in carrying away into error a willing or undistinguishing mind, is exhibited in a lively and practical manner by Semler's tenets. One of the first of which is thus briefly elicited : virtue is the object, therefore it is the test of Scripture. In which, the insidious and almost latent fallacy is the conclusion, not expressed, but implied, that our own opinion of virtue must afford the test : for we can apply no other : whereas Holy Scripture furnishes the best model of virtue ; and thus becomes the proper test of itself. Another of his tenets is, that there is so much error in all persons' creeds, that all are equally bad. The error of which conclusion, supposing the premiss to be true, lies only in the word "equally." Another is, that there can be no uniform creed, but that the effect of Scripture must vary, and be accommodated to all tastes. Where the error lies in not confining the accommodation to the disposition of the good and conscientious man. A fourth tenet is, that our Saviour and his apostles accommodated their doctrine to the notions of those whom they addressed ; and therefore it was all an accommodation ; even to their notion (a false one) of a divine revelation. In

which the conclusion, though it is a fallacy only of degree and of extent, is so palpable an exaggeration as to turn all the rest into a caricature.

For truth lies as much as anything in the extent which is given to each principle and proposition ; and the least exaggeration or hyperbole is sufficient to deform, and to disfigure entirely the portraiture of truth. The beau-ideal, on this account, and every thing that partakes of it, essentially deforms and sacrifices truth. Romance, pictures, poetry, the drama, and all the rest of the fine arts, magnify the effect of particular passions, and features of nature, to the sacrifice of the rest ; and none of them, therefore, are true to nature : though their subjects are taken from it.

The magnifying, in like manner, the importance of systems and generalizations into more than instruments for our use, is a similar distortion of truth. For though their materials are derived from nature, yet they are all of them more of the colour of our own minds, than of the colour of truth, and of nature itself.

It is essentially requisite, also, to the exhibiting of the true complexion and extent of most propositions, to qualify them by examples, for the sake of showing their real intention and meaning ; and also by such limitations as these, of *cæteris paribus*, “for the most part,” &c. : otherwise half the rules and principles of human life will contradict one another. It is education, for instance, which makes one man superior to another : *cæteris paribus*. But we are, also, every one of us, by birth and nature, different, and distinguished in point of talents. A wise man, again, will

be happier than other men : *cæteris paribus*. But still there are afflictions which can make even a wise man unhappy.

Closely allied to this principle, that the truth of a proposition consists in the extent which is given to it, is this also, that truth lies in the strict application which is made of it ; which is only another part of the same feature, of the *fine line of truth*. It is this alone which can enable us to explain all fallacies and paradoxes, and render consistent apparently contradictory truths. It is said, "Let your light shine before men." And again it is said, "Let not your left hand know what your right hand doeth:" Which is a seeming contradiction. But these two precepts are completely reconciled by the intention and application ; both of them equally admitting the use and duty of example : both equally discountenancing vanity and ostentation.

The truth of propositions requires upon all occasions, restrictions analogous to those enforced for certain purposes only, by the old logicians,—namely, those of the *ad idem : eodem modo : secundum idem : in eodem tempore*. That is, that every proposition should be applied with strict reference to the proper relation : to the proper subject : to the proper conditions and circumstances : to the proper time and period.

The sophisms which have puzzled the schoolmen for ages, are immediately to be solved by the adoption of these restrictions. One of the most famous of them, which has the name of "Mentiens," is thus enunciated. If a man says he lies :—then, if he lies, he speaks truth : if he speaks truth, he lies. The fallacy, which is obvious, consists in this, that the words "he lies," in

the indefinite present tense, is spoken of two different "times." For a man cannot say "he lies," or "he is lying," with reference to the moment of time in which he is speaking, or to the words themselves which he is then uttering. He can only mean that "he has told" a lie :—and then the sophism is solved.

The question of the identity of the ship *Argo* is solved by the strict application of the term to the proper "subjects." For it is the same as it was a hundred years ago, as to its name and character : it is different as to its materials.

The sophism of Euathlus is solved as easily. He had agreed to pay Protagoras for instructing him in oratory, whenever he should have first pleaded and gained a cause. But he neglected to commence pleading ; till Protagoras forced him, by bringing an action for the sum agreed upon. Then Protagoras pleaded thus :—"O foolish young man, if I gain my cause, you must pay me by the sentence of the judges ; if I lose it, you must pay me, for the condition will be fulfilled." But Euathlus retorted,—“If I gain my cause I am acquit by the sentence of the judges ; if I lose it, you have no right to the money, for the condition will be unperformed.” The judges were unable to solve this dilemma, and gave no decision.

But the solution is this, by the mere reference to "time." An action is not brought but for that which is due at the time when it is commenced. Euathlus, therefore, plainly did not owe the money ; and the case was not altered by its becoming due at the moment of decision. But Protagoras might then bring another action for the money immediately after. And it would

not be for the same cause of action ; for though it would be for exactly the same "amount," there is nothing else which would be the same ; the time and the circumstances would both be different.

It is very evident that all these restrictions, which confine truth within a fine line, and narrow it in extent, and restrict it in application, must be of manifold greater necessity in following up a process and course of reasoning ; in which one truth which has been established is made the foundation of another, and so on. Since, if one short step or trifling deviation may occasion so great a degree of error, that which is raised and built upon it may be immeasurably distant indeed from the truth. The real effect is, that two steps are in general sufficient to carry those who sink the most deeply into error to their ultimate conclusion. As in the last example above given of Semler's opinions ; in which, from a mere exaggeration of an important truth, he makes one step to actual scepticism. So Hobbes passes in like manner, by two steps only, from the vindication of the natural equality of men, to that of absolute tyranny. So Des Cartes also builds the most implicit self-credulity, upon the immediate foundation of an universal scepticism.

The line of truth is not only a fine and narrow line, but it is likewise a *shifting* and a *varying* one : suiting itself to every different case, and every the minutest change and shade of difference of occasion, and of circumstance.

Socrates would not admit of any such thing as an absolute proposition ; but he required an application to be given to every truth. He would not even allow

of any such thing as an absolute good ; but everything must be good, he said, for one purpose or another : as for an inflammation or a fever. Even health and wealth he did not admit to be things absolutely good in themselves ; but only when they were wisely and usefully applied. For goodness and usefulness are ideas of exceedingly great latitude, and of ever-varying and indefinite application.

The sciences of physics and mathematics, for instance, are good for war and commerce ; but they are bad when applied to religion. And so of most other ideas and propositions.

Standards and models are not of the nature of truth ; and particularly what are called standards and models of perfection : which, in the judgments of men are so generally sought after, and confidently insisted upon.

Nothing, for example, is more contrary to sound judgment and truth, than the standard of human proportion fixed by Albert Durer : which, instead of being adapted to every subject whatever, is suited to no one ; and agreeable to no one, perhaps, of the best examples of the ancients,—who always adapted the proportion to the particular subject : making a Hercules of larger proportion above the waist, and an Apollo of more than ordinary length in the lower extremities. It is the same with the standard of proportion in architecture ; which the modern architects have made to be a mean between all the examples and specimens of the Greeks : though no two of these are exactly alike in themselves ; each being suited to the particular position, relation, and circumstances under which it was placed.

But this feature of truth is especially applicable

to truth in conduct and action : which is the real wisdom.

Wisdom lies in the adaptation of opinion and conduct to existing circumstances ; which vary infinitely. No two situations in life are exactly alike. No two occasions in politics. Burke advises, pursuing this very line of thought, that we should not use history as affording examples in political subjects : for that no two occasions can be exactly the same ; but as the foundation and discipline of a habit : a tact in judging and determining of political events and circumstances.

Wisdom is justified of all her acts, as well as of all her children : that is, of their variety and apparent inconsistency ; agreeing with, and corresponding to, the infinite changes and variety which she meets with of occasion and circumstance.

Another feature and characteristic of truth, which yields to no one in necessity and importance, is the accurate perception of the real nature and *extent* of our knowledge in each subject. This also is wisdom. A true judgment cannot be formed unless we are acquainted with the precise limits and value of our experience ; and the degree of certainty which it really warrants.

When we say that, “ we know this man,”—if we suppose that we have a better ground of belief than, that report says he is such an one ; or that a certain person, or two perhaps, told us so,—according to the real circumstances,—we infer a greater degree of certainty than our experience warrants, and our judgment is not a true one. A knowledge of the actual foundation of our religious opinions, which is often that only

of fashion and habit, would bring many of us into a state of most unexpected doubt and diffidence, and convince us of the duty of inquiring much more deeply and effectually for ourselves. A conviction of the actual and necessary limits of our experience and perceptions,* would show us the point at which faith and revelation must begin : at which revelation has begun ; and would furnish the very best possible antidote to scepticism. A conviction also of the necessary limits of our knowledge and faculties would satisfy us that we cannot possibly know God according to the pattern of His own nature, but only according to the mould of our own minds ; and would divert us from the attempted solution of seeming paradoxes, (to the perversion of revelation) ; and reconcile us to the belief of mysterious truths, though beyond our comprehension.

A much fuller illustration will hereafter be given of the actual limits of our knowledge and understanding. In the mean time, it is evident, that if we were fully acquainted with, and appreciated justly the real extent and value of our knowledge, there might, and must indeed be, ignorance on almost every subject ; but there could not be error. Such a knowledge too, and such a state of truth and integrity of mind, (which is founded upon clear and well-directed apprehension,) must sharpen the appetite of the mind for inquiry ; and at the same time, teach it to avoid all those channels and directions in which knowledge cannot be pursued with any good hope of success.

Truth lies also in *the mode of treatment*. It is essen-

* See Mansel's Bampton Lectures, 1858.

tial to the true understanding and advancement of any subject of knowledge, that it should be pursued in a right manner and direction, and with a proper habit of mind. The neglect of this precaution leads to error infallibly ; to misdirection of inquiry and talent ; and to infinite wanderings of thought and judgment, difficulties and intricacy.

Every study has in it something which is peculiar ; and it requires, for the discernment and advancement of truth in it, a peculiar habit and direction of the mind, to the exclusion of all others : as much as the manual and ocular skill of the painter, the sculptor, or the lapidary, is peculiar to himself and to his own handicraft, and exclusive of all the rest. For division of labour is required also in the mind, as much, nay more perhaps, than in manual occupations ; and a peculiar habit, and tact, and skill in execution, is full as requisite to the becoming an adept, in any one of the subjects of its operation. The attempt to rebel against this first principle of the mind, this law of human nature, is sure to lead to the error of clothing one species of truth in the dress which is made for, and fitted to some other. It is much the same as the currier's attempt at a city wall, who would infallibly begin to build it of leather.*

This kind of error may be well illustrated by a comparison of the ethics of the Greeks, and the Chinese,—the former of whom, thought only of studying human nature theoretically and scientifically, and with the view of reducing it to a system ; the latter have con-

* This will be found further illustrated, under the head of Different stand-points of the mind, in the 4th Book.

sidered it in a merely practical light. This is sufficiently exhibited in the leading precept of each. The first principle of Grecian ethics is, "Know thyself." The first principle of the Chinese is "Conquer thyself."

The same species of error is the foundation of all such frivolous questions as, Whether a happy man can be said to become unhappy after he is dead (supposing him to be annihilated): which is gravely discussed by Aristotle in his *Ethics*. And, Whether a son can benefit his father, or a servant his master: which is debated by Seneca. Such error and misapprehension, and misdirection of inquiry, must infallibly be the effect of applying a mind trained up to physical studies, and a law of mind formed upon a constant examination of the material and external world, to the investigation of the moral and internal world, the language and principles of the mind, and the laws of human nature.

This is the foundation and true analysis of all metaphysics: which are nothing more than the pursuit of a subject in a wrong direction; and such a view and study of it as is necessarily entertained, when it is endeavoured to bring it to a model, a method, and a denomination, which is suited to some other. It is the same as measuring solids by triangles, thought by the bushel or the foot-rule, or time by the acre.

There is no such department of science expressly as metaphysics. No science, or subject either, is in itself metaphysical: since all unrevealed knowledge is founded upon experience; and experience rightly employed is simple and of the same kind, whether it be of the internal, or of the external senses. But every subject whatever may be treated metaphysically; which is

done when the experience and principles which have been gained in one subject, are applied to some other subject which is of a different kind. No one subject of experience is, in its own nature, much more abstruse and abstract than another; if the mind be but practised in it, and properly directed. But every subject is difficult upon the first acquaintance, especially to the mind which has been much exercised in an opposite direction; as logic is to the poet: mathematics to the moral philosopher: law to the classical scholar, or the grammarian: the pure spirit of religion to all those whose minds are chiefly bent upon the study of the science of external nature.

Now Kant proves himself to be a complete metaphysician, when he brings an entirely mathematical genius to the study of the mind, and of human nature; and accordingly endeavours to reduce all their principles and operations to mathematical measurement. As witness his definition of "now,"—that it is the end of past time, and the beginning of the future, being a part of neither: by which he proves that it does not exist, nor is anything better than a mathematical point. Strange! that any man should not perceive that the idea of "now," is a human and practical idea. That he should not be able to distinguish a moral idea from a mathematical one. That he should be so carried away by his own sophistry, as not to apprehend, that our notion of time is that of the succession of events; and that time is a mere quality of the events of life, namely, the relation of succession under which we experience them; and that time is not a canvass upon which events are painted, but that time itself is depicted

upon the events. Another event, therefore, may be happening now, that is, while we are reading or writing, concurrently and simultaneously, and without the relation of succession.

Equally metaphysical is Aristotle's reasoning in proof of the existence of the *πρῶτη ὑλη*, or one primitive matter: not by a physical or chemical analysis, which could be the only successful method or road to such a truth; but by separating in his mind the qualities of objects, as, from the marble, the form which makes it a statue: from the timber the shape which makes it a bed:—that is, by a mental, instead of a manual analysis, in a mere question of physics.

Aristotle's system of logic, and more particularly that part of it which treats of syllogism, is a whole tissue of metaphysics; because he attempts to reduce to mathematical form and proof, and to mathematical exactness, subjects expressly of a moral character, and resting entirely upon the principles of human nature.

The idolatry of the ancients, and especially of the Egyptians, had its growth in metaphysics. From the want of knowing the actual and necessary limits of their knowledge, and of a proper direction and application of it, they confounded their observations and experience in one subject with their speculations in another; and exalted mere analogies and metaphors into realities, and fables into truths. Accidental coincidences and correspondences, partial influences which had been perceived to operate between the heavens and the earth, were made the sufficient ground for deifying the heavenly bodies, and attributing to them

special offices, forms, and attributes. A cat then, having been used at first to represent, was next held sacred and dedicated to the moon, (already deified on account of its natural influences): because the pupil of its eyes contracted and dilated something like her horns. The fawn, in like manner, was dedicated to Osiris, because it is speckled like the heavens.

Meteorology was no sooner partially understood, and the influence of the heavenly bodies upon external nature, than astrology became a science for the pretended anticipation of moral and political events.

As soon as astronomy was advanced a little, it was confounded with religion. Then a complete cycle or revolution of the heavenly bodies, became the period of a dynasty of the gods. The race of the sun through all the signs of the Zodiac, was allegorized into a history of universal conquests, and confounded with the achievements and expeditions of their deified kings. So infected with science, and so unskilled were they in truth, that they could not receive even the doctrine of the one true God, without representing Him by an arithmetical abstraction; and immediately they identified the monad and the duad, with the good and the evil principles. Thus was all science misused and perverted, and knowledge confounded; and what was simple, and easy, and useful, when kept separate and in its proper place, became confused, perplexed, and false, and mischievous, by being mixed up with other subjects.*

* "Metaphysical" is the most indefinite of expressions. Most people mean by it, whatever is abstruse. But then

The same form of error, as it has infected all men, in all ages, and in every part of the world, so is it not

mathematics would be metaphysical : being the most opposite of anything to it. No definition of metaphysics will be found consistent but that which makes it to be, the measuring of a proposition or idea by that which is incommensurate with it. The Brahminic and Buddhist religionists are the most flagrant dealers in metaphysics. They mingle together natural science, poetic metaphor, moral sense, and religious thought, with such subtle contrivance and power of mind, and triumphant fitness and ingenuity, and beauty, that to those who master the system it is quite captivating. The following is one of the most intelligible examples : being the 15th chapter of the Bhagavad-Gítá.

“ The Holy One spoke.” “ They say that the eternal sacred fig-tree” (the Banyan tree) “ grows with its roots above, and its branches downwards. He who knows this tree, the leaves of which are Vedic hymns, knows the Vedas. Its branches shoot forth downwards and upwards, nourished and increased by the qualities, and having objects of sense as tendrils. And their roots which extend downwards, are the connecting bonds of action in the world of man. Its form is not thus understood in this world, neither its end, nor its beginning, nor its constitution. When one has hewn down this sacred fig-tree, together with its wide-spreading roots, with the steady axe of indifference (to the world), then may that place be sought, to which those who go return no more : and I allude to that primeval spirit only, from which the eternal stream (of life) emanates. Those who are free from arrogance and delusion, who have subdued the vice of attachment to the world, always constant to the Adhyátmá,* who have repulsed desires, and are free from the influence of those opposites known as pleasure and pain, proceed unbewildered to that imperishable place. Neither sun nor moon illumines that spot. The place to which those who go return not is my supreme dwelling. An eternal portion of me only, having assumed life in this world of life, attracts the heart and the five senses, which belong to nature. Whatever

* Adhyátmá is the supreme spirit in his relation to the souls of men.

wholly eradicated from us, and from religion itself, even at the present day.

The same kind of perversion and error, when it descends into the ordinary intercourse of life, is what is vulgarly expressed by the term "humbug;" in moral action and motive, hypocrisy:—which is the setting

body the sovereign spirit enters and quits, it is connected with it by snatching those senses from nature, even as the breeze snatches perfume from their very bed. This spirit approaches the objects of sense, by presiding over the ear, the eye, the touch, the taste, and the smell, and also over the heart. The foolish do not perceive it when it quits the body, nor when it remains (in it), nor when, actuated by the qualities, it enjoys (the world). But those who have the eyes of knowledge do perceive it. And devotees, who strive to do so, perceive it dwelling within themselves; but those who have not overcome themselves, being destitute of sense, do not perceive it, even though they strive to do so. Know that that brilliance which enters the sun and illumines the whole earth, and which is in the moon, and in fire, is of me. And I enter the ground and support of all living things by my vigour; and I nourish all herbs, becoming that moisture of which the peculiar property is taste. And becoming fire, I enter the body of the living, and being associated with their inspiration and expiration, cause food of the four kinds to digest. And I enter the heart of each one, and from me come memory, knowledge, and reason. And I alone am to be known by all the Vedas, and I am the composer of the Vedānta, and also the interpreter of the Vedas. These two spirits exist in the world, the divisible and also the indivisible. The divisible is every living being. The indivisible is said to be that which pervades all. But there is another, the highest spirit (Purusha), designated by the name of the Supreme Soul, which, as the imperishable master, penetrates and sustains the triple world. Since I surpass the divisible, and am higher also than the indivisible, I am, therefore, celebrated in the world and in the Vedas as the highest person. He who, not deluded (by the world), knows me to be thus the highest Person, knows all things, and worships me by every condition. Thus

up one thing in the place of another; and the professing one reason and principle ostensibly, while acting under a different one. This leads the mind into difficulty and perplexity, and draws the understanding and conduct astray.

When Aristotle goes round about to prove that

have I declared this most mystic science. A man, if he knows this science, will be wise and do his duty."

Thus in the Upanishads, etc. (stands) the Fifteenth Chapter, by name "Devotion by the attainment to the highest Person."

The following is an example of Buddhist divinity, or philosophy.

"What then is the cause of existence? The cause of existence, says the Buddhist metaphysician, is attachment,—and inclination towards something; and this attachment arises from thirst or desire. Desire presupposes perception of the object desired; perception presupposes contact; contact, at least a sentient contact, presupposes the senses; and as the senses can only perceive what has form and name, or what is distinct, distinction is the real cause of all the effects which end in existence, birth, and pain. Now this distinction itself is the result of conception or ideas; but these ideas, so far from being, as in Greek philosophy, the true and everlasting forms of the Absolute, are here represented as mere illusions, the effects of ignorance (*avidyâ*). Ignorance, therefore, is really the primary cause of all that seems to exist. To know that ignorance, as the root of all evil, is the same as to destroy it, and with it all effects that flowed from it." (From MAX MULLER'S *Chips of a German Workshop*, vol. i. Buddhist Pilgrims.)

What makes these metaphysical is evidently the pursuit of knowledge in a false and unpractical direction. And if the Greek philosophy speculates upon and tries to elaborate "the true and everlasting forms of the Absolute," it is metaphysical in the same sense as that of the Buddhists and Hindoos. How opposite are those systems, which mystify religion, and make it impossible and impracticable to the vulgar, to that of the Scriptures: whose object and method is to reveal truth; and to reveal it in a practical form; and to the most simple.

energy and activity are requisite to happiness, by showing that it is most consistent with the constitution of man, for the sake of giving to the pretended discovery something more of dignity,—whereas it is a simple matter of every-day experience, that occupation is a great assistant to happiness:—when he gave, therefore, a different proof from that which had informed and convinced himself, this was humbug. It is hypocrisy, when the rules of politeness and etiquette, which are founded upon the profession of kindness and disinterestedness, are put in practice, as they most frequently are, for merely selfish purposes. When the law of honour, which being founded upon love of opinion, teaches us nevertheless to hold ourselves above all opinion: this is humbug. Hypocrisy, in short, is everything whatsoever that pursues one object and professes another; and which, like the common forms and phraseology of fashionable life, holds out different views, and reasons and arguments, from those which go directly to the point and to the purpose. It is hypocrisy when these, which are mere forms, are attempted to be verified, and made consistent, and to be considered as anything more than the outward dress and furniture, which they really are; when fiction is attempted to be used as anything but mere fiction, and to be made to agree with realities; when appearances are endeavoured to be reconciled and identified with truth. We humbug ourselves as well as others whenever we endeavour to pursue a reason or argument to consistency, which has been merely adopted for ceremony, or to suit the occasion, and to conceal, as is often the case, our real motives.

It is sufficiently evident, that falsehood is of the essence, and of the very nature, of both these topics; and that they must lead to infinite complication and mystery: much like the false astronomical principle of cycles and epicycles, which multiplied and involved calculations to infinity in the Ptolemaic system; but which were all at once dispelled, evolved, and simplified, by the truth and beauty of the Copernican theory.

Since truth lies within a fine and narrow line: since this also is a varying one: since truth lies also in the exact extent, and in the proper application which is given to every principle: since truth requires that we should perceive and appreciate the real nature and extent of our knowledge; and further, that we should pursue each subject with the right mode of treatment, and with the frame of mind especially suited to it: it follows, that the first and most essential requisite for the attainment of truth, must be a clear, accurate, and unbiassed "apprehension," to enable us perfectly to perceive these objects. It also follows, that very slight influences and disturbing causes must be sufficient to divert us from the direct path of truth; especially in those cases, in which, from the failure and inadequacy of the apprehension, there is principal occasion for the exercise of judgment.

It may be objected that, after all, I have not defined or described what truth is; that I have only shown its properties and characteristics. But this is the most essential requisite in directing the use and aim of a real Logic. I answer as Socrates did, when asked what was the absolutely good. Was it the good

for sore eyes, he said ; or good for a fever ? Religion which is the subject of the Scriptures, is not defined in the Scriptures. Everybody knows what religion is. Everyone knows what truth is, in its general object. But they do not know the difficulties and niceties of it. But this men ought first to know, if they mean to pursue it to any purpose, that truth is in a fine line, which easily evades us ; and that it is of a different nature in each particular subject :—That there is truth of external apprehension,—truth of mental,—truth of moral apprehension,—truth of mathematical,—truth of legal,—truth of medical apprehension ; truth in discernment of physical, of moral, of religious cause and motive. These must be distinguished and appreciated. It was impossible to answer Pilate's question, What is truth ?—who did not know that there was a distinction between worldly and heavenly truth.

CHAPTER IX.

LANGUAGE.

SUCH being the form and character of truth, and so great the nicety and strictness requisite to preserve it in its perfect feature, Language is a medium wholly incompetent to afford a test of it, or even to become a safe and sufficient vehicle for perpetuating or conveying it.

Language is not an instrument capable of such exactness, and nicety of gradation, as shall correspond to, or coincide with truth; but on the contrary it possesses, in its very nature, such a degree of latitude, as is absolutely destructive of, and contradictory to it.

This prejudicial quality of language presents itself to us continually, and at every step, in all those subjects which are of the most vital importance. In cases even in which everything has been done which can be done by language, to produce certainty, there still remains the greatest actual difficulty and difference of opinion, as to the truth and meaning.

Not to dwell upon laws of human enactment, though they afford such very frequent instances of doubt and difference of opinion: (because in them

the meaning itself may have been originally imperfect; and out of them intentions must often be elicited, which in reality they were never intended to express, to suit occasions which had never been contemplated :) we will take some of our first illustrations from the divine law; since in this, the language itself is fixed and acknowledged, and the fulness and sufficiency of the original meaning cannot be doubted. All the difference of interpretation, therefore, that can exist, must arise wholly from the latitude and imperfection of language itself.

The whole world is to this day divided upon the question, whether the First and Second Commandments prohibit the adoration of saints, and the respect paid to pictures and relics. Nay the principal divisions and differences of opinion between the Protestants and the Roman Catholics, may nearly all of them be brought to the issue, of the meaning and intention of two or three approved and authentic passages: such as, whether the promises, "I will give *thee* the keys;" and, "Whatsoever *thou* shalt bind," were intended to mean, "Thou, and all those, however unworthy of the trust, who shall be elected as thy successors:" and whether the expression, "This is My body," is the use of a figure, or whether it imports a miracle, unique and solitary in its kind: a miracle without an outward sign.

So weak is the effect of words and of the very plainest language, in enforcing a direct meaning, that in the Protestant Church of England, of those who hold the Seventeenth Article of that Church, it is within a moderate computation to say, that not one-

half receive the doctrine of predestination as contained in it.*

It is not to be wondered at, therefore, that being so far removed from the example of the Divine Master who commanded us, "Hate your lives:" "Love your enemies;" "Be ye perfect," we should not be able to comprehend in the real sense, nor to agree as to the intention of these expressions. They forcibly show, by the difference of meaning which is attributed to them, the utter impotence of language; the deficiencies of which can in these cases be supplied only by the deep study and understanding, nay, and the practice too, of those and all the other rules and precepts of their Divine Author.

For this and the like purposes, it is evidently necessary that we should familiarize ourselves with the context of every passage that is doubtful in any

* The words of the Article are these: "Predestination to life is the everlasting purpose of God, whereby (before the foundations of the world were laid) he hath constantly decreed by his counsel secret to us, to deliver from curse and damnation those whom he hath chosen in Christ out of mankind, and to bring them by Christ to everlasting salvation as vessels made to honour."

Then follow a brief exposition of the steps and progress which the elect undergo; and some salutary and judicious cautions against the abuse of this doctrine to despair, or to the pursuit of an evil and careless course of living: for that "We must receive the promises of God in such wise as they be generally set forth to us in Holy Scripture; and in our doings that Will of God is to be followed which we have expressly declared to us in the Word of God." Which words have been made by some the outlet to a doctrine directly opposite to the first part of the Article.

author ; and not with the context only, but with all the other precepts and writings, with the conduct, with the mind even of their original inventor ; otherwise it is not possible to arrive with certainty and precision at his full meaning. How, without some such a general acquaintance, can we determine whether, when David exclaims with poetic rapture, "Thou wilt not leave my soul in hell ;" "Thou wilt show me the path of life ;" and in the next Psalm again, "I shall behold thy presence in righteousness, and shall be satisfied when I awake up with thy likeness ;" whether he meant to express his confidence in a future life, or only in a resurrection from his temporal calamities ?

But propositions, for the most part, when they are used in reasoning, or treasured up in the memory, stand simple and alone ; and are transferred from one subject to another bare and naked, without context or illustration. In such case, they must ever be liable to lose their proper character. For it cannot be possible to entertain them in their precise colour, extent, and application, without keeping the mind constantly bent upon the general use and intentions of the author, from whose reasonings they are derived.

It is further necessary to read an author himself, if we would understand him, and to read him through. For no disciple or commentator can appreciate fully, and fathom entirely, the mind of his master ; and all that any one of a peculiar turn of thought had ever written in illustration and explanation of his opinions,

could not be sufficient to convey fully to another person the exact pattern and law of his mind. The whole Bible is necessary to the full and safe interpretation of any one difficult passage in it; and even that is weak and insufficient, without adding the practice prescribed by it.

The latitude of language is so great, and propositions have so little force or precision when standing alone:—as for example, when Seneca and the Christian both of them say, that virtue obtains immortal glory, yet with totally different meanings:—that it is absolutely necessary, in any process of reasoning, to give examples and illustrations of the subject; which are the context of the truths. These speak to the mind and memory of the student, and not to the ear only; and enlist his own actual experience into the understanding and confession of the proofs. No truth or principle deduced from a course of reasoning is, in fact, worth any more than the examples employed in the proof and illustration of it warrant. The mind fixes its attention upon the instances given, which determine the character and force of the proposition; and thinking that they afford a full illustration of it in its utmost extent, feels no backwardness in giving to it an implicit assent. But nevertheless, it has only assented to it in this its limited sense. But if, forgetting the examples which governed it, and unaware of the elliptical and imperfect character of language, it transfers the proposition to some other and a different subject, it is liable to infinite abuse and misdirection, and to all those errors which are consequent upon the

latitude inherent in language. As when axioms of equality are transferred from magnitudes, to ranks and conditions of life; or of identity, from substances, to thoughts and character.

This enables us to appreciate the true value and application of Aristotle's logic. For he and all his commentators having illustrated its principles only by such examples as the letters A, B, C; or by the proof perhaps, of a few trifling abstract propositions, or obsolete truisms; we are not warranted in giving credit to it in any higher subjects. Hence also we learn, that the proper and peculiar subjects of Locke's and Bacon's reasonings, are principally physics. Examples, in short, which speak to the mind, and not to the ear only, are absolutely necessary, to define the character of all truths that are sustained by reasoning, and to fix their extent.

The examples given in this treatise are sufficient to prove and illustrate the truths which are proposed in it; but not to carry them out to their full extent and importance. What is attempted, is to point out the character and direction which is intended to be given to the truths demonstrated. The verification of them in their full extent, and to their proper purpose, can only be completed by the additional examples which each person must draw from his own private experience, and from their proving to be a key applicable to the solution and interpretation of all the processes of their thoughts and conduct, in all the ordinary topics and operations of everyday life. The truest, and most illustrative, and most confirmatory examples, are

those of the most simple and ordinary occurrence ; such as would greatly lower the dignity of truth and wisdom to the eyes and tastes of the world in general ; which is not yet ripe for the reception and use of them in the true, unaffected, vulgar simplicity of their genuine form and character.

In further support of the sentence thus pronounced, of the utter impotence of language, to the fixing of truth—(I entirely omit mention of physical science, as not worthy of the name of truth),—and in proceeding to advance more specific charges against it, one of the first causes of its insufficiency to be noticed, is its *elliptical* character.

So many truths and ideas are contained under one short proposition, in all the common forms and uses of language, and the most extensive, and complicated, and qualified ones are so briefly and categorically expressed, that the precise and actual meaning is in general little better than guessed at. This, however, is seemingly a fault in the use, rather than in the essential nature of language ; since it might be conquered by the patient and laborious adoption of the requisite enumeration, detail, and qualification : as in the formal style and enunciation in use in the processes of law and mathematics. If, however, it requires such a tedious prolixity to express with certainty and precision such simple operations of the will, as are mostly the subjects of legal instruments, and much more those of mathematical demonstration ; it is certain, at least, that the prolixity and detail, which would be requisite for the sufficient conveyance of moral truth

and reasoning, will never be adopted. But neither is it possible. What could any detail or verbosity of expression accomplish towards enumerating the whole multitude of the cases which are comprised under the simple precept, for instance, Commit no murder? It is evident that any attempt at such an enumeration must be utterly impotent; and that a far better test and criterion is to be afforded by the conscience and the heart.

Another defect, chargeable against language, is its *ambiguity*. This is an imperfection in the words themselves, which go to the composition of propositions, and the expression of our meaning. The vocabulary of the mind is of infinitely greater copiousness than the vocabulary of the tongue. The effect is, that one word must necessarily become the vehicle to convey many ideas; and must be subject, therefore, to endless misconception, and misconstruction,—as to whether it is used in the primary sense, or in its vulgar and general sense, or in its analogous, or its metaphorical sense, or, lastly, in its technical sense.

“Lightness,” is a quality of very different import, according as it is applied to weight, to colour, to soils, and to digestion. Yet some persons have been so far deceived by the ambiguity, as to imagine cream to be lighter of digestion than milk, because it rises to the top of it. As well might we adopt a diet of sponge, or of cork; or suppose that silver is lighter of weight than iron, because of its colour. Light soils are frequently the darkest in colour; as they are heaviest also in specific gravity. Yet these ambiguities and

supposed analogies are sufficient constantly to deceive. How much more then to afford a handle for wilful misapprehension !

But there are very many more varieties in the meaning of words, than are founded in metaphors and figures of speech. They are infinitely varied also by use and custom, according to their connexion, and relation, and their position in a sentence. There is the greatest difference of meaning, for instance, in the word “same,” when it is applied to two persons, who are said to have the “same” idea ; and to one person, to whom it is said, you are not the “same” man you were ; and when it is said again of two houses, that they are built of the “same” stone. Aristotle, in his *Rhetoric*, uses *αγαθος*, the Greek word for “good,” in the three different senses of riches, virtue, and objects of desire generally,—corresponding nearly to the English expressions, good, goods, and good things,—in the following single sentence. *Ὡς γὰρ προσήκον αὐτοῖς ἀγαθοῖς εἶναι, ὅτι προσήκει τοῖς ἀγαθῶς ἔχουσι, ζήλουνσι τὰ τοιαῦτα τῶν ἀγαθῶν.* “These men aspire after such objects, (honours, offices of high distinction), because, being conspicuous for their riches, they think it is incumbent upon them to make themselves equally conspicuous for their virtues and character, (and so to deserve them.)*” It would be endless to enumerate the different acceptations of the terms moist, substance, solid, fluid. “Action,” has a totally different signification, according as it is applied to a fable, to a horse, in a court of law, or to an orator. The word “heaven” has three different

* ARISTOT. *Rhetor.* lib. ii. cap. 11.

meanings, and "earth" two, at least, in the first chapter of Genesis. The "whole world," means sometimes the Jewish nation, sometimes the Roman empire, sometimes, as at the present day, all the nations of the globe. "For ever" means fifty years, many generations, and eternity. In short, there is no end at all to the latitude of meaning and interpretation, which may be given to almost all language, if the mere words alone and naked expressions are taken into consideration.

No terms are so indefinite, though they would seem to be so precise, as the terms "all," and "every." When it is said, "Submit yourselves to every ordinance of man," it cannot be insisted that we should obey even the commands of emperors to abjure our religion. So every command, and truth, and proposition whatsoever, and however generally expressed, must always be understood with reference to the subject, and to the proper and peculiar occasion of it.

The imperfection of written language (and it is with this principally that we have to do, since it is that alone which, if any, could pretend to set itself up as a test to establish and perpetuate truth,) is exhibited also in another light, by a comparison with spoken language. *Habet enim nescio quid energiae Viva Vox.* There is, in truth, a force and character in spoken language, which, however it be subject to its own imperfections, (and it is liable to all the faults and weaknesses above enumerated,) sets it much above the power of written language; as may readily be seen from such a familiar example, as "Do you ride to town to-morrow?" which may be varied in its meaning

six times at least, by merely changing the position of the emphasis, and placing it upon each word successively: for which there is no sign or mark generally adopted in written language. But it is still more evident from the difficulty which is experienced in representing the passions; and from the embarrassment under which every poet and thoughtful writer labours in the expression of his full meaning, from the paucity and insufficiency of the notes of expression and punctuation. According to the difference of emphasis and intonation which may be given to the various parts of this sentence, "The beauties of her face are not to be compared to the beauties of her mind," every degree of beauty may be indicated, from the highest pitch of it to positive ugliness. But all these are deficiencies and imperfections, which, however universal they may be known to be, and however sure a handle they may afford for misapprehension, to those who are willing to be deceived, may yet seem to be such as are not necessarily inherent in the very constitution of language itself; nor to be wholly incapable of remedy, provided a sufficient zeal and diligence, and devotedness to truth, were to be enlisted. There is one defect, however, inherent in the very nature of language, and of any communicating medium of the thoughts, which is incapable of remedy; and this arises out of the constitution of the mind itself.

The thoughts themselves, which are expressed by the same words, are not precisely the same in any two minds. Not only the same word represents a variety of different ideas and meanings in the mind of any one

person, but any one of these meanings may not exactly correspond to the meaning and idea which the most nearly resembles it in the mind of another. Each person's ideas being formed from his own experience; and the experience of no two people being of exactly the same objects; the impressions and thoughts of every two persons must differ accordingly.

The expression, "the world," conveys to each person's mind the impression of that particular circle which he has been in the habit of moving in, and whose tone and opinions he is in the practice of reverencing. The impression which each person attaches to the word "home," is different according to his particular experience. "Ennui," though a word adopted by us from the French, has among the English a new and different meaning; because our national temperament is not generally liable to that peculiar state of feeling which obtains for itself that name in France.

It is the same with characters, and tempers, and passions; which occasion different meanings to be attached to the words expressing them, according to their infinite peculiarities and variety. We know, for instance, one person who, for a time, could attach no definite and distinct idea to the term "anger," because it was many years since he had suffered himself to give way to that passion. It is the same with "love," which is incomprehensible to a child; with "maternal affection," which is inconceivable by those who have never had children. Charity, also, in like manner, and Christian love, and faith, and hope, and devotion, and a good conscience, — all these have meanings

different according to each person's experience, and according to the degree of his proficiency, and his near approach to the perfection of the Christian character. In all these cases, language is impotent; and necessarily awakens different ideas and impressions in different people.

Yet Harris, reasoning from the supposed identity of meanings corresponding to words, argues from this supposition for the innateness of ideas. "Is it not marvellous there should be *so exact an identity of our ideas*, if they were only generated from *sensible* objects, infinite in number, ever changing, distant in time, distant in place, and no one particular the same with any other?"* Nothing could be more clearly and happily expressed! He has stated all the reasons against his own hypothesis; which being obviously erroneous, the argument, in other respects correct, establishes the very opposite conclusion.

Language is impotent, and unequal to the representation of this variety of ideas. Though it possesses a partial and imperfect elasticity, which enables it to bend and accommodate itself, in some measure, to this feature of the mind, yet it can accomplish this only in a very limited degree, without becoming technical; and then it is, as it were, a new language. It is the necessary effect of this infirmity, that language is, for the most part, fitted to the calibre of ordinary understandings; and this being fixed at but a very low standard, language is, in general, but ill adapted for the expression of truth and wisdom, according to the

* Hermes, B. iii. ch. 4.

understanding and depth of a master, in any one branch or inquiry. Such are, in consequence, continually perplexed and in difficulty to obtain a vehicle for their true meaning; and their language becoming gradually, and at length technical, their real intention is easily lost and misunderstood, or perhaps never discovered.

To the real master, however, in any subject of knowledge, language in effect is of little consequence. And there is no better evidence, perhaps, of the impotence of language, and of the supremacy of ideas and of the mind, than that, while the same sentence conveys opposite impressions to two persons who are not both adepts and conversant with the subject, very different sentences and propositions will convey the same meaning to the real proficient. So little force is there in words! Such an one will therefore recognise in the precept, "Be ye perfect, even as your Father is perfect,"—the same command exactly as in the expression, "Be ye holy, for I am holy." The advantage attributed to the division of labour, will contain, to such an one, no new or different truth from the proverb, "Jack of all trades never makes his fortune." "Every man's praise and censure is first moulded in his own nature," will be seen to identify itself with these two, "None but the worthy can discern the worthy:" and, "We see ourself always whatever glass we look into."

Such, then, is the utter impotence of language; and its inefficiency, as affording a test for reasoning, and a sufficient vehicle for truth. We must look, therefore, for some higher and more perfect instru-

ment, which shall be less incompetent, when subjected to the highest possible correction, to furnish a proper guarantee and security.

The mind, doubtless, is the proper sphere and region of truth:—which lies, therefore, not in the force and accuracy of language; but in the correction, and use, and proper application of ideas and apprehension.

The impotence and error of Aristotle's Logic, in that it professes to establish truth by the agency of words, is an obvious corollary from the above demonstration.

CHAPTER X.

ANALYSIS OF APPREHENSION.

LANGUAGE, then, being incapable of affording a test of truth, or of becoming a secure and perfect vehicle for conveying it: and truth lying in the use and correctness of ideas and apprehension; it becomes therefore an important and necessary task to analyse the nature of these. And if the apprehension of the ideas of sensation and reflection, simple and complex ideas, abstract and concrete, also the apprehension of ideas, facts, and truths, be subject to the same divisions, and liable to the same errors, and the same corrections, it will be unnecessary, at least for our present purpose, though we shall give examples in each, to dwell particularly upon these distinctions.

In all these, one grand and general division is to be made, into apprehension of the first and of the second intent. Apprehension in the *first intent*, is that which is the result of actual experience; apprehension in the *second intent*, is derived from representation. It is necessary to make, and to dwell particularly upon this distinction: since without it we cannot possibly appreciate the real value of our knowledge; nor be competent to apply the proper remedy, according to the

exigencies of each case : whether of clearing and enlarging the apprehension, or of correcting the judgment.

We are but few of us convinced, or at all sensible of the exceedingly small proportion of our knowledge which is supported by actual experience, or apprehension in the "first intent;" and of the incomparable superiority which such knowledge possesses over all such as rests upon a less firm and adequate basis. The subjects of real knowledge,—that is, objects, events, and circumstances, as they really exist, and present themselves before the senses,—are so complicated, have so many parts and features, are subject to so many varieties, combinations, degrees, and different modifications; in short, they altogether form the subject of such very complex and dissimilar ideas, that no description or representation can possibly convey a perfect conception of them. No new idea, therefore, simple or compound, can be truly conceived, that is, can be so far mastered and made our own, as properly to constitute a part of truth, and be used in reasoning without liability to error, until it has been made the subject of present experience; that is, of apprehension in the first intent.

From the bigoted devotion of the learned to mathematics—that narrow, and flattering science!—men have generally supposed that, as in that particular branch, so likewise in every other, ideas might be defined. But, as we have already shown, the subjects of mathematics are not truth and realities, but mere fictions; and even these fictions themselves, in the higher branches, are some of them so difficult of

description and explanation, that it is only after very much teaching and illustration, and studious and painful reflection, and "making them your own," that many persons are able to arrive at an understanding even of these, sufficient to secure them from misapplication.

That what is called logical definition does not in any way pretend to give an adequate and sufficient description, is too obvious to need labouring. It in no case professes or attempts to furnish us with a full picture and representation of the subject; such a one as, we assert, is absolutely requisite to ensure the safe use and application of knowledge to the purposes of truth. A "sheep" is a quadruped, horned and ruminating. So is an ox, or a goat. "Animal bipes implume," an "unfledged biped," goes somewhat further, indeed, towards a definition; for it distinguishes man from all other animals. But it is no description of him. Such definitions are mere tokens and symbols; which convey to us no perfect or adequate representation. Instead of instructing, or of advancing us in knowledge, they can only recall ideas to the mind which have been previously stored in it; and serve, therefore, little other or more useful purpose, than the mere names themselves.

"Definition," in moral subjects, by which is usually and justly intended an adequate description, is impossible.

The impotence of description, and its utter inability to lay a foundation for just and conclusive reasoning, is invariably felt by every one of us, when we witness, for the first time, any object which has been formerly

described to us ; that is, when we at length apprehend it in the first, instead of the second intent. This is the case with truths, and with facts, with scenery more especially, with simple ideas, with the passions and affections. No one can conceive a perfect idea of what is meant by the common expression of the walls “ringing,” sometimes caused by a high note of the voice, who has not himself experienced that remarkable effect. No one can entertain an adequate conception of the motion of the “*punctum saliens*” in an egg, that vital seat and source of animation, and active germ of life, who has not actually witnessed that very beautiful and wonderful phenomenon, as it were of nothing leaping into existence, of invisibility into vision, of matter into life,—and again vanishing from the sight, fifty or a hundred times in a minute. When, in horsemanship we learn for the first time, by a happy and successful execution of it, after a long and tedious course of instruction, what is meant by the terms, “seat” and “balance ;” “going with your horse ;” the “appui,” a “hand,”—being that delicate support and sympathy, that connexion and intelligence, which subsists between the rider and his horse, which the riding-master has for weeks, perhaps, been in vain endeavouring to make known by description,—it is, as it were, the catching of a new idea, the flashing of a new and adequate conception ; which makes us immediately confess the impotence of description, and the absolute need of practical experience.

To Byron himself, and to those who have witnessed the same phenomenon,

“ The rose-tints, which summer's twilight leaves
Upon the lofty glacier's virgin snow,”

is an idea in the first intent. To as many of his readers as have not themselves witnessed that beautiful appearance, it is an idea in the second intent only, and can create but a very imperfect and inadequate conception.

When Johnson said,

“ I feel the soft infection
Flush in my cheek and wander in my veins :
Give me the Grecian art of soft persuasion.—

“ Sure this is love ! which I have heretofore conceived the dream of idle maids and wanton poets :” here he confesses the insufficiency of his idea when only in the second intent ; and that consequently he had reasoned ill upon it, and arrived at a wrong conclusion. It is the same, and more than the same, with Christian love, and hope, and faith.

The influence, in like manner, of the Holy Spirit, needs to be experienced, to be fully conceived and confessed. To be experienced, it needs to be cultivated. Sadly few, in consequence, are those among us who really believe and acknowledge its existence in the proper intent. The peace of God indeed passes all understanding, to every one except those who have actually experienced, and apprehended its operation in the first intent.*

* To a certain Jew, who was most diligent and dutiful in the repetition of his prayers, it presented itself as a new and incomprehensible truth, when he was first told by a Christian

Of the ideas of simple objects sufficient examples have been given to explain our meaning. For a confirmation of the same remark in respect to "facts," we need only refer each person to his own experience of the inadequacy of the conception produced by a previous description of any scene or fact which he has afterwards witnessed. And this becomes still more conspicuous and apparent, from the very different impressions which are derived by different persons from the same description. The style, the manner, the relations, the accompaniments, must be always, in part at least, supplied by the mind receiving the description; and each person cannot but in consequence conceive a somewhat different idea. This will be always most evident from a comparison of the ideas so formed with one another; and from the very opposite opinions and conclusions which are derived from them. And each of them perhaps is as inadequate, and as different from the reality, as is always the idea of scenery which is derived from even the very best description. But facts being in their nature things which happen, and are then passed away, they cannot easily be made the subject of future comparison; and particular examples are not, therefore, so readily to be given of them, as of ideas and truths. Being made up however, and com-

missionary, that prayer was *asking*. It must be equally incomprehensible to all those who recite prayers, and count the number of Paters and Aves that they repeat on their beads and rosaries. None but those who have recognised the actual being and presence of Him who is hearing and answering prayer, can know or understand that prayer is asking.

pounded of more simple and permanent ideas, they must necessarily be subject to the same qualifications at least, and the same imperfections.

But the misconception and misuse of "truths," from the apprehending of them only in the second intent, is the greatest and most extensive, and most serious of all the impediments to just reasoning, and to the cause of truth.

When truths are received and stored up within the memory in the second intent, that is, through the means of instruction only, and not of experience, they acquire comparatively little or no force and meaning. They are available, therefore, to very little useful purpose; and are liable to every sort of error, abuse, and misdirection.

Many people have constantly in their mouths such proverbs as these:—"There is no disputing about tastes." "Virtue is its own reward." "Prosperity is our worst enemy." All these are truths of the highest elevation, and of the very first magnitude. But at the same time they obtain no manner of force or effect from being taught by rote, and merely repeated. To render them really useful and effectual, each person must have observed and recognised for himself, the essential and very beneficial varieties of mind, by which the tastes of different persons become severally adapted to the innumerable differences and varieties of nature; the permanent blessings, in like manner, of a good conscience, following upon virtuous practice and self-denial in transient objects; and must have felt within himself, and regretted, the irresistible

and hateful change of mind, and enervation of character, which long-enjoyed prosperity produces, in spite of effort and resolution.

It is use and practice alone which can instruct us in the true meaning of the maxim, "Liberty is of the mind;" and "real freedom consists in setting our affections upon things within our own power." Thomas à Kempis's receipt for liberty and peace of mind, "Study to promote the wishes of others rather than your own: choose the less rather than the greater: make yourself voluntarily every body's servant, and take the lowest place: wish with all your heart, and pray that the will of God may be done in you entirely:" These maxims cannot be fully understood, and properly appreciated, but through the same preparation, of a practical and habitual experience.

How much less, therefore, the precepts of our blessed Saviour, "Take up the cross:" "Hate your own lives:" "Love your enemies."

Now this distinction of ideas and apprehension, into *the first and second intent*, has not hitherto been appreciated:* neither the excessive vagueness of most people's language and ideas; and the very vast proportion of them which are entertained only in a secondary sense.

All the ordinary purposes of conversation may be served by ideas in the second intent. And this has

* This is not the same division which is used in Aristotle's logic, and which is translated in the schools by the expressions, "*the first and second intention*." The present is a division and difference of ideas themselves: Aristotle's professes to be a distinction only in words and language.

hitherto led us astray, so as not to observe and condemn their weakness and insufficiency ; nor to acknowledge the vastly greater force and efficacy of ideas which are gained by actual experience. This deception, indeed, may be carried to such an extent, that Blacklock and others, who had been blind from their birth, have succeeded in writing very good descriptive poetry. All their ideas, however, upon such subjects, must have been of the second intent. Persons, frequently, will talk and reason with the greatest confidence upon pictures, and countenance, and other subjects of taste and beauty, who have never had sight which could enable them to distinguish these objects. The ideas of such persons have all of them, in like manner, been ideas only of the second intent. The reasoning in such cases must certainly be considered as only fictitious ; and cannot possibly be classed, or enlisted for a moment, among the ranks of truth. And doubtless, if by a sudden recovery of their sight, the subjects which they had so freely and so dexterously handled, were placed before the eyes of these very persons, they would not be able to recognise them as agreeing with their own description ; and perhaps, nay probably, would never afterwards recover the power of describing and talking of them so fluently again.

Such persons' ideas are in reality as vague and inadequate, and as necessarily liable to misapplication, as those of the blind man, who said that scarlet seemed to him like the sound of a trumpet.

The above is the fictitious universe of words. And all ideas, whether in a blind man or another, that are derived from language and words only, are of the

second intent ; and, however sufficient for poetry and amusement, are inadequate for the purposes of certainty and truth.

Of these, the most prominent and prejudicial of any, are those which are founded upon technical terms. For, requiring for the most part, from the difficulties of the subject, a somewhat deeper attention and experience, which is not generally given to them, the words in consequence take the place of ideas, and represent only, instead of recalling them.

The effect is, that they are used with every possible degree of vagueness and misapplication ; and lead to interminable error and controversy. This is the case often with the words, "cause," and "materialism:" with "regeneration" too, sometimes, and "justification;" all which are occasionally made the subject of misuse and endless debate, for the want of definite and duly collected ideas being attached to them. And this must ever be the case, with all such ideas as are derived primarily and principally from words and language.

The only course which can effectually lead to a proper use of language, is the gaining an experience of the objects themselves, in the first place, which are the foundation of the ideas ; and subsequently attaching to them those words and expressions which are the most appropriate and applicable. Then only, when we have made the subject properly our own, can we use ideas and language in proper connexion ; whether our first acquaintance with them has been derived from actual experience, or from language. It is this alone which can enable us fully to comprehend and sympathise with our author. To which end we must endeavour, by

acquaintance with his subjects, by familiarity and intimacy with his manner, with the law of his mind, in a manner with himself, to qualify ourselves to understand, to follow, to go with him, to lead him as it were, as the accomplished rider his horse, so as in short to anticipate him rather, by accompanying his ideas, than to follow his language.

Now the most distinguishing and peculiar feature of "first apprehension," such as it has been described, is, that all its ideas are *individual*.

All objects, and facts, and occurrences in nature, and in real life, are individual and particular. Such, consequently, are the first ideas of them. This is the case also with truths which are in the first intent; which are the collection only of a number of particular and individual facts.

But all abstract and general ideas are secondary; and so also are all abstract and general truths; unless they really represent, and actually recall to the memory, the particular ideas and facts which they had been made to stand for: as "home" does our own house and family: "happiness," our particular experience of it,—our own delights and hobbies: "pain," "pleasure," "virtue," "temptation," such express instances of each as we have peculiarly experienced, and have been the most frequently subject to.

Hence it appears, that ideas in the "first intent" are peculiar to ourselves, and more or less different in any two persons. And this is more effectually the case, in those relating to the passions and affections, and other subjects of the internal senses; since these differ the most widely and essentially in different per-

sons. Let us instance in "beauty." This is analogous to the subject of taste in the palate. And if the palate of one person is pleased by sweets, of another by bitters, of a third by acids, how very much more numerous and opposite, it may be expected, must be the tastes of different minds, and the variety of meanings therefore which different persons will attribute to the term "beauty."

For this reason also, as much as that before mentioned, definition in moral subjects is impossible.

"Truths" also in the first intent, (and these are our principal and peculiar subject,) differ from one another in each mind; since they represent a number of individual facts and circumstances, the knowledge and collection of which is necessarily different in each person's experience.

So that each person has, as it were, his own private and peculiar catalogue of ideas, and code of truth.

Yet these, notwithstanding, may each of them be true. And they are certain to possess greater similarity with one another, and to occasion infinitely less misunderstanding and disagreement, than the ideas of any two persons only in the second intent. Their resemblance, when just, and when they are properly collected, is sufficiently close to serve all the essential uses and purposes of moral truth.

But it is important to remark, and to impress ourselves fully with this circumstance, that our own knowledge may become secondary; which, in effect, it does almost necessarily in a great measure. This takes place when we retain the general ideas only, or general truths, in the memory, to the loss or neglect of the

particular instances which they record and represent. This must render such truths and knowledge liable to nearly the same abuse as secondary knowledge of the ordinary kind; namely, such as has never had any other foundation than representation and description. For instance, if we had concluded, that perfection was at variance with the laws and principles of human nature, we might perhaps forget the sources from whence we derived this conclusion; and determine, in consequence, that moral perfection was an improper aim and study, and that we can have had no pattern of it held out to us. Or, having concluded, from acquaintance chiefly with moral subjects, that system was not a law of nature: we might apply it, through a similar neglect, without any qualification, to all physics. Montesquieu seems to have laboured under some such a forgetfulness, when he contrasted the perfect observance of the physical laws of the universe with the ill-observance of the moral laws. For it must have escaped him, that the physical laws of the universe had become known to him only from this their observance; but the moral laws from the command to obey them. Whether, therefore, there be any other physical laws which are not strictly observed, and of which we are ignorant from this very non-obedience, in our present ignorance of meteorology, and of the causes of the great changes and anomalies of the seasons, we cannot possibly determine.

Another observation worthy of notice is, that syllogism derives its whole apparent force and consequence from the use of truths in the second intent. Since if they were properly conceived and applied in the first

intent, all the particular instances which the premisses comprehend would be known at once ; and they would be seen either to contain the conclusion among them, or not. And if not, then there is no proper or effectual syllogism.

It is sufficiently obvious that there can never be any positive certainty, except in knowledge of the first intent.* All the rest is liable to misapprehension ; and must be the subject, therefore, of conjecture and probability. And the great object in making this distinction is, to show the extremely narrow and limited field which is properly to be attributed to certainty in knowledge : especially in moral subjects ; and in order that the importance and necessity of judgment in almost all cases, may be duly estimated. At the same time, the great advantage and pre-eminence, in respect of certainty, which is given to knowledge by first apprehension, will be justly appreciated ; and we shall not be disposed to rest satisfied and contented, till we have attained to it in all particulars and circumstances which will by any means admit of it. It will also assist us to discover more clearly, and to apply the proper remedy, whether towards enlarging the apprehension, or correcting the judgment, according to the necessities and capabilities of each case.

* Mathematical ideas are of the first intent ; for they are creations of the mind : they have no other origin. And as the mind creates them, this self-creation may be set in action by definition. The groundwork of mathematical ideas,—as a circle, a triangle,—is laid by analogy in natural objects ; but the idea of a perfect circle, a perfect triangle,—which do not exist in reality,—is a creation of the mind ; and what it creates itself it perceives or conceives in the first intent.

But the province of judgment is not entirely coincident and co-extensive with apprehension in the second intent. It exercises its office even in assisting our experience; and in correcting the imperfect perception of objects actually before us: as will appear more clearly from the further analysis of apprehension contained in the Second Book. For apprehension itself is liable to error, even in the first intent; and actual experience is not necessarily perfect vision.

The use and importance of first apprehension in the promotion of discovery, is also one of its most conspicuous pretensions and qualities. Almost every accession of a new idea in the first intent leads to further and more extended knowledge; and real and valuable discoveries are, in fact, mostly arrived at through this process. The real nature of the Greek accent has not hitherto been discovered, for want of the experience of any such thing in reality, that is, in the first intent, to which the descriptions and accounts given of it might answer. The consequence is, that all the explanations and allusions which are handed down by the ancient writers, are to us mere words and cyphers, and without definite ideas and meanings attached to them. The real nature and use of the Greek digamma has probably been best discovered and explained by Thelwall: who arrived at the knowledge of it, from having observed a use apparently corresponding to it in the English language; and gained, therefore, a new and adequate conception in the first intent.

Having exhibited the principal and characteristic feature upon which, so far as apprehension is concerned, the truth and certainty of knowledge depend, it is further necessary to acquaint ourselves with the nature of knowledge itself; that, understanding its necessary objects and limits, we may be able to judge of the proper subjects of inquiry, and of the best means of arriving at them.

Knowledge is not, what Locke supposes, the perception of the agreement of ideas; nor truth, the joining of signs, according to this actual agreement. These are chimeras conjured up from the ashes of the very furnace, in which he himself had decomposed and dissipated the false idol of language.

But ideas themselves are knowledge, whether simple or compound: of the first, or second intent. Opinion is the attaching and attributing these ideas to real things; and truth is the actual agreement of these ideas and of opinions with realities.

The idea of colour is knowledge. The idea of pleasure, and of pain, is knowledge. The idea of heat is knowledge. The idea of pain following or accompanying heat, also is knowledge. The agreement of this idea with reality and experience, is truth. In like manner, the ideas of virtue and of duty, are knowledge. The idea of God, is knowledge. The idea of God rewarding us for the performance of our duty in a future life, is knowledge. The agreement of this idea with reality, is truth. The belief of such a revelation, and of its agreement with reality, is the opinion of its truth.

Neither does the mind know things, "not imme-

diately, but only through the intervention of ideas ;” as the same very acute and powerful analyst informs us. The mind itself is nothing but a collection of ideas : at least, we can have no other definite conception of it ; all the rest that is said of it is mere figure and analogy. Truth is the agreement of this collection, of the mind itself, with the real state and condition of the universe.

Now with respect to the nature of knowledge, we know, and can know, only effects : that is, the effects or impressions made and received upon our minds and bodies ; the experience, in short, and evidence of the external and internal senses. The knowledge and understanding of this truth is necessary to the keeping our views and opinions, our pursuits and investigations, in a just and profitable channel.

Again, some things affect our external, some our internal senses. Some affect two or more senses : some only one of them : some none at all directly and immediately. Such accordingly is our knowledge as to quality ; but not, therefore, as to its certainty. That which affects but one sense only, may be as certain as that which affects any greater number. The effects, too, which proceed indirectly, and consequentially, from sources which are themselves unperceivable, are as certain as any of the rest.

We perceive substances by two senses at least : light by only one : sounds by the ear only. In all these, we experience nothing but the effects ; which constitute necessarily our whole idea of them. It is the same also with the mind. Thoughts, and opinion, and will, and reasoning, are the effects of what is

supposed to be, and is called, the mind. But they are, to us at least, and apart from revelation, the mind itself; and constitute our whole knowledge and idea of it. So memory is only the effect and phenomenon of old ideas recurring, which in the same way constitute our whole experience of it. Our idea and knowledge of the "will," is that only of action following immediately upon the balance of motives: of "free will," difference of action, succeeding upon similar ideas and inducements.

From which it appears, that the knowledge of mind is not at all less complete, than the knowledge of matter. Nay, perhaps, it is even more so: since we have a full perception of all that exists and can affect us in the one case; and in the other, we believe that there is much more behind that might be known, if we could attain to the discovery of it. But the difference in this respect is not important nor real, nor worth dwelling upon in the search after truth.

Again, our idea of a "fluid," is that of a particular kind of effect upon one sense at least: as of the air, or water. Our idea of an invisible and impalpable fluid, as of "nervous fluid," "magnetism," "electricity," is still that only of their laws and effects. And these effects, though seemingly secondary and consequential only, and consisting in nothing but the motions of matter, are as certain as if they affected the senses in any other way; and in a way resembling the effects of the palpable fluids: with the idea of which they have no sort of connection except by mere metaphor and distant analogy, and perhaps, by the expectation that they may one day be made palpable to some one of the

senses. In other respects, they bear no resemblance to real fluids, except by the mere negative quality of non-resistance: that is, by no quality at all.

“Life,” is an idea and knowledge only of inward impressions made upon the internal senses; and of outward operations, palpable to the external senses.

“Spirit,” is the idea merely of power and intelligence, that is, of certain operations and effects, added to a vague and figurative notion of something analogous to our own sensations of life. But this last is conjecture, and beyond the region of knowledge; and an illegitimate and fruitless subject of inquiry.

Our idea of “time,” is that only of the qualities and relations of events, in regard to one another and to our own actions: of “space,” the qualities and effects of bodies in relation to us, and to each other. “Cause,” is only the idea of the immediate succession of one phenomenon to another; together with some merely metaphorical notion of power, derived from our own acts and sensations. But even this last is a knowledge only of the succession of effects; for we know not, nor can we conceive any other connection between volition and motion. “Vis inertiae,” is the idea of the uniform fact, of a body resisting any change of motion, in proportion to its weight; without any further idea of a cause or reason. The communication of motion from one body to another by “impact,” is a simple idea of the succession of two effects: uniform and consistent indeed: but without our being able to see, or to conceive any idea whatever of a reason for it; and without the slightest resemblance or analogy in this case, to the production of motion by human power and volition.

Thus we can have knowledge only of effects, and of impressions made directly upon the senses, even when they are in the first intent. A sufficient acquaintance with this property of knowledge being necessary to the effectual pursuit and progress of truth,—with this view, it will be somewhat more fully treated of in the Second Book.

There is much knowledge, in its own nature cognisable to the senses, of which, however, we have had no experience. This is the subject of description; and is of the second intent. And the desirable object in such cases to be attained, is to convert it, through actual experience, into knowledge of the first intent. And if that cannot be, then to correct and perfect it as much as possible by analogy of things experienced in the first intent: which is the exercise of judgment.

There is much knowledge even in subjects cognisable by the apprehension, which cannot be brought within positive experience; from the circumstance of distance either of time or place. This is peculiarly the province of testimony; and must for ever continue to be of the second intent.

There is again, another and higher class of knowledge, the subjects of which are in their own nature beyond our cognizance and perceptions: such are, God, spirits, immortal happiness, creation, eternity. All these, as being in their very nature beyond our conceptions, can be partially only, and very imperfectly made known to us, by metaphors and parables. These must ever necessarily be only of the second intent; and cannot safely be made the subject of human investigation. We can never pretend to any know-

ledge or discovery of them for ourselves; nor even to an adequate and sufficient understanding of them. They remain, therefore, for ever the express province of revelation; and the subject of faith.

These also, since it is only from a due understanding of the nature and limits of each subject that we can address ourselves properly to every kind of truth, will be more fully treated of in the next Book.

The limits also of observation being narrow, and apprehension imperfect, and the attention remiss, even in subjects of actual experience, something will be attempted in aid of these imperfections: by pointing out the best means of enlarging the sphere of apprehension; and still more, of improving the powers and habits of attention. Memory also, which is a part of apprehension, and a most important and essential branch of it, may be made in some measure a more effectual instrument by exercise and instruction.

But after all that can be done to assist the senses, and to enlarge the field and powers of apprehension, it must still remain for ever a weak and very imperfect instrument, incapable of penetrating sufficiently and adequately into many branches of knowledge and truth. Much knowledge and experience, even in the first intent, must still be indistinct; and insufficient, therefore, to furnish a ground for certainty, and to ensure rectitude and confidence in action. The multiplicity and minuteness of parts and circumstances, especially in moral subjects, are too great and complicating to be made the subject of distinct and adequate observation; much more for them to be retained and treasured up in the memory for full examination and

comparison. Many of the perceptions and ideas of the mind, especially of those parts and accompaniments which are not the principal features in any object, are vague, and hasty, and indeterminate, and more in the nature of impressions than ideas. The apprehension glances with inconceivable rapidity over the innumerable parts and features of an object, and passes them before it in a hasty and imperfect review: much in the same way as the mind does its thoughts; and this with a hurry and indistinctness which render them wholly incapable of expression, and even of definite perception.

This peculiar and inestimable power which it possesses, enables the mind to embrace, though imperfectly, a large field, and a great multitude of parts and objects; and it assumes different names and titles, according to the various subjects of its employment. In subjects of action it takes the name of habit; in the exercise of which, the attention is always so lulled by familiarity and facility, that the apprehension does not notice even its own perceptions. Yet it has these perceptions: as is evident, for example, in the balance of the body, which is maintained partly by the habitual attention of the eye, though without its being appreciated. But it may readily be discovered, from the much greater difficulty of balancing oneself upon one leg in the dark; and from the tendency to fall, when the eye is partially distorted by intoxication or giddiness.

In subjects of choice and pleasure, it is called taste: which is the habit or disposition of the mind towards

particular objects, for reasons but imperfectly definable or observable.

In the subject of reasoning, it is common sense ; which is, as it were, the taste of the mind for truth : being those vague and multiplied, and indefinite reasons for our opinions and conviction, which we cannot express or enumerate. A further use will be made of this remark in the following Chapter.

These, therefore, and all such ideas and conceptions, which may go by the name rather of impressions than of ideas, since they are not made the subject of distinct apprehension, are, together with all other inadequate and imperfect conceptions, and ideas of the second intent, the province of "*judgment.*" To lay a just and proper ground for certainty, apprehension not only must be in the first intent, but must be distinct and perfect. Such perfection then, especially in moral subjects, the very simplest of which is scarcely capable of being made the subject of accurate knowledge, being in general beyond our attainment,—the importance and necessity of "*judgment,*" and also its province and uses, stand confessed.

CHAPTER XI.

ANALYSIS OF JUDGMENT.

SINCE the province of Judgment is the region beyond distinct vision:—(for there is *certainty* where the whole subject is clearly apprehended, and all its parts and features, according to the first intent;—and then there is no room for error, or judgment:—) therefore, judgment must for the most part be exercised in ignorance; and affords, as it were, the means of going right even in the dark.

Absolute certainty in any subject cannot be attained, till all its parts have been viewed in connexion and comparison with one another, and with all the other subjects and circumstances which can have any relation to it, in detail and with precision. To perform this, however, in subjects relating to human life, or of a complicated character, with a promptitude sufficient to govern action, and with an actual and present view of all these several terms of comparison, such as may prevent mistake, is impossible to the human mind. It is necessary, therefore, that we should endeavour to remedy this incapacity by means of some subsidiary instrument; or by some more or less efficient substitute for this unattainable faculty.

To this end, we are in the habit of treasuring up and of recording in the memory, all our former observations and experiences, and of using them as a fund, from which we may draw such materials as are best suited to the present occasion, for the purpose of making them the subject of an imperfect and secondary comparison. As for example, having observed that Kant, and Des Cartes, and Leibnitz, and the logicians, and a hundred others, have endeavoured to reduce proofs and reasonings upon moral subjects to mathematical certainty, and all equally without success, we conclude that the particular present attempt will likewise be unsuccessful; and in general, that the thing itself is impossible. Or, one medicine having failed, and another, and a third, and twenty more of equal pretensions, we fully believe that the present one will fail also; and that the disease is incurable.

Here the different objects are not made the subject of a perfect comparison; for all the points of agreement and of difference are not distinctly seen. They furnish the ground, therefore, only of a distant and incomplete analogy.

But this is not yet judgment; though it is an approach to it: being an operation one step removed from the process of decision by distinct and perfect apprehension. For such comparisons may be made at random, and by any one; and may readily be framed so as to contradict one another. As in the case of a gentleman, who having taken almost every quack medicine that he had seen advertised, said that they had each of them done him a little good. He, therefore, had as good grounds for taking every new medicine as

one who has found them all fail would have for taking none ; yet both of them might in their respective inferences be equally wrong. Opposite, and consequently false conclusions, may be derived from such direct and scanty evidences ; and truth, which lies so much in nicety and precision, and may so easily be disturbed by very slight and impalpable differences, is not to be determined upon any such bald and isolated comparisons.

The value and use of these several terms of analogy themselves require to be estimated, by a more distant and general range of experiences ; which, though further removed individually from the actual subject of inquiry, yet by their joint and co-operating effect, bearing upon it evenly from all points of a wide and extended circumference, exercise an equal, steady, and powerful influence. These remote experiences cannot, from their very extensive range, and their infinite multiplicity, be brought individually into comparison with the proposed subject ; neither can they be separately and distinctly treasured up and arranged in the firmament of memory. They assume, therefore, the form of general truths and principles ; classing themselves as it were, into systems, and clusters, and *nebulæ* ; and giving by this means a plan, and order, and comprehensible arrangement to the universe of the mind.

Judgment, then, is the collection of a multitude of general truths and principles, stored up in the mind, for use and application upon all occasions ; the particular facts and examples which formed the ground of them, being no longer separately and distinctly considered. It is a multitude of general experiences,

more or less just; and the more numerous, and the more just, and the more accurate they are, the better will be the judgment.

But there is a still higher, and more distant, and more important firmament of experiences, of which the individual parts and members are not clearly distinguishable even upon examination,—have never been distinguishable,—at least to the natural apprehension, and to the ordinary measure of attention. This is the sphere and region of impressions, which constitute, as it were, another firmament still higher than the last; a kind of general and universal nebula, an uniform and even milky way, embracing, at the distance of the greatest possible stretch of vision, the whole universe of truth and reasoning, and exercising the most powerful and important, though an almost imperceptible influence, in determining the fine, and fugitive line of truth in any subject.*

For our experiences becoming more safe and impartial the more they are multiplied, and the more enlarged the basis upon which they rest, by far the greater and the more important part of them are incapable, from the infirmity of memory and apprehension, of separate enumeration, or even perception. They become at length, therefore, mere impressions: as it

* The distinction must be well observed between judgment and argument. In conversation two or three examples, in a popular assembly one bold principle or striking anecdote, will produce a stronger conviction than the whole multitude of principles and qualifying circumstances, which must be considered in forming a correct judgment. Judgment is the province of logic; argument and persuasion of rhetoric.

were a generalisation of general principles; and form one undefined, unbroken, and universal halo of light round the whole mind and reasoning faculties, controlling and correcting the assent, and determining the exact seat of truth, by an infinite number of slight and imperceptible influences: as the centre of gravity in any body is maintained by the joint influence of all the particles of matter composing it; the place of each single body in the universe, by that of the whole collective multitude of co-operating orbs.

Thus in physiognomy we judge by associations and impressions which we cannot easily define or analyse, of the expression of a countenance, whether it be amiable, or selfish, or sincere, or hypocritical. In a similar way, we decide upon the physiognomy or countenance of an argument or an opinion whether it be true or fallacious; from the mere habit only and impression. In the extent to which Aristotle's logic is capable of carrying us, we judge of an imperfect form of reasoning, by the mere impression and tact which is created by the practice of reducing arguments into syllogism.

Of the laws of nature we have, in like manner, impressions more or less definite, and more or less approaching to the tangible form of principles; by which we reject or embrace at first sight most of the opinions and speculations which are presented to us. Some, for instance, will have an impression that nature is greatly disposed to intricacy; or to an intricacy greater, at least, than is agreeable to a particular proposed hypothesis; others, that the characteristic feature of nature is simplicity. Some will conceive that nature

readily admits of classification and systems ; others, that it does not, or not such as the one proposed. So also, we have a general idea that perfection is, or is not attainable. And some again, have a general disposition to receive ; others on the contrary, to mistrust all, or all such theories.

It is the same with the principles and the interpretation of human nature. One has an impression that the motives of men in general are good ; another, that they are uniformly selfish and bad. One person, from the constant accession of fresh knowledge which he is receiving every moment, conceives an impression of his universal knowingness ; another, upon the very same ground, of his fallibility and ignorance. One has an impression, gained from his experience, in favour of a belief in dreams, and ghosts, and witches ; which is called credulity. Another has a general prepossession against all supernatural interferences ; which is scepticism. Such accordingly is the character of the judgment.

These impressions sometimes obtain the title of intuition, sometimes of common sense ; being a something which we feel to exercise a convincing and peremptory influence over our opinions and judgments, without our being at all able to define or analyse it. They form and become, as it were, the taste of the mind for truth. They grow at length into a disposition and habit, a principle or law of the mind ; which having been originally built up and fashioned according to its natural or acquired character, becomes itself the pattern by which it still increases its growth, and multiplies its store. For there is a unity in this prin-

ciple ; an individuality of feature and character, which assimilates and identifies this whole community of impressions and opinions. And as there are a multitude of principles, which are each the generalisation of a multitude of individual experiences, and a multitude of impressions, which are a generalisation of such generalisations ; so there is one principle, harmonious, uniform, consistent with itself, and agreeing in all its parts, which generalises and gives a unity to the whole.

Judgment is *the Law of the mind*: the habit, and character of it :—which assays every thing by its own colour and disposition, as the infallible test ; which endeavours to infuse its own spirit and principle into everything that it touches, and to assimilate it to itself :—a loadstone, which attracts to it everything of its own proper pole and metal, and revolts from and repels the opposite. As different apprehensions derive different ideas and meanings from the same passage or expression, so different judgments accept different truths from the same source ; and the same judgment receives one fact or opinion, and rejects another, which are in direct proximity together, and rest exactly upon the same evidence. As we recognise our own motives and character in other people, so judgment recognises and embraces those truths only, which accord and harmonise with itself.

Hence it is, that every religion, and each sect or school of philosophy, contains within itself in a manner its own evidences : in each one of them, that idea of God, or of the moral character, which is admired and religiously approved from education, fashioning and framing the judgment, and becoming the nucleus

round which all reasonings and notions relating to those subjects gather and form. In our own case, that idea which is derived from the Bible: the impression of that one, infinite, uniform, universal mind, which breathes through and identifies the whole.

Hence also, truth needs in general only to be mentioned, and exhibited to the mind, to be embraced by those who are capable of receiving it. And thus we in a manner even judge rightly by prepossession and prejudice.

At the same time it is evident, that a false and vicious law of mind, like a stained and faulty glass, cannot fail to discolour everything that is viewed through it; and to distort the single and narrow line of truth.

We have hitherto viewed and spoken of judgment only in its largest and most extended sense; and as giving a taste and aptness for truth in all subjects generally. This is the highest species of judgment: which is properly entitled wisdom; and is particularly exercised in the office of self-government, and the ordinary affairs of life.

There is also, however, a proper and peculiar law of mind especially adapted to each branch of science, and to each profession: as mathematics, law, medicine, moral philosophy, religion; and even to each particular line of study and pursuit. There is even a law of mind peculiarly suited to each individual subject. So that a man may judge well upon one particular subject only:—as on the other hand, there are many who upon some one particular topic, are uniformly ill-judging and wrong-headed.

We will not occupy ourselves with these last. They

stand upon the same reasons and foundation as the rest; and for the understanding and remedy of them, we need but follow out the same principles and instructions, as are applicable to the more general.

Now judgment, or “the law of the mind,” being a *habit*, it assumes to itself all the character and qualities of a habit, and is for the most part engrossing and exclusive; and one law of mind has a tendency to exclude* and counteract every other.

Habit is the first principle and characteristic feature of human nature. It arises at once out of its natural imperfection, and its capacity for improvement. Practice is the instrument and means towards this improvement. But we cannot bestow the same measure of practice upon all subjects equally; nor raise ourselves by it to a great efficiency in any one branch, except to the neglect, in some measure, and in derogation of the rest. The consequence is, that habits are exclusive; and men of ordinary diligence and capacity cannot reasonably aspire to excellence in more than one line.

For the same reason, the habit of mind generated by exclusive application to any one science or profession, warps and narrows in a greater or less degree

* But does not necessarily exclude. As a skilful man can think in various languages,—each of which expresses a different, a national habit of thought,—and change from one to the other with the language which he uses, so a man of enlarged mind and study may think and reason mathematically of astronomy, technically of law, materially of physics, morally of morals, spiritually and faithfully of religious truths. But, in general, philosophy produces inaptitude for religion: though not in such men as Bacon and Newton.

that comprehensive and universal judgment, or wisdom, which is general in its application; and still more directly opposes itself to the law of mind suited to any other particular and subordinate branch. Hence arises the difficulty, and very disgust which is excited, upon the first attempt at learning any new science, as mathematics, law, logic; and the disposition which we feel to ridicule their seeming absurdity. For the tone and thought of reasoning in each of them being entirely new, and very different from any to which we have before habituated ourselves, it seems upon the first acquaintance, that the author's mode of thinking is distorted, and his mind deluded: which disgust, however, wears off entirely, as soon as we have mastered the few first principles. Even each author has, in like manner, his peculiar law of mind, and exclusive mode of thinking; which renders his reasoning more or less difficult, till we have become familiar with it.

This law of mind which each man possesses, is the test and standard to which he endeavours to reduce every subject, and every process of reasoning which is presented to him; and he apprehends or hesitates, he embraces or revolts from it, according as it enters readily and fits into this mould. Each person endeavours, too, to impress this stamp and pattern upon all subjects and materials whatsoever, and to infuse his own native tone and spirit into everything which he takes up; whether it be fitted in its own nature or not, to assume such a form and character. Hence the violence and injury that is continually done to truth, by the proficient in one branch or profession endeavouring to

make his principles universal, and to handle the subjects of other sciences and departments than his own; which was done by Kant, when he endeavoured to apply a mathematical law of mind, and a mechanical judgment, to the study of human nature: with Aristotle, when he pursued a similar process with respect to reasoning: with the schoolmen, when they applied a mind habituated to classical and heathen learning, to the interpretation of Christianity, and produced a scholastic theology and religion.

And hence arises the necessity which there is for a body of men, set apart and secluded from secular pursuits, and worldly science and learning, and exclusively devoted to the study of religion.

It is not, however, to be understood without limit or qualification, that no person can possibly judge well and rightly in any two subjects. Judgment is a habit; and as such, it follows all the principles and conditions of a habit. And as a man may possess more habits than one, though in general but one in the greatest degree of perfection of which he is capable, so the judgment also may be highly cultivated and improved in different lines. The extent of this capacity depends greatly upon the natural talent and enlargement, much more upon the proper cultivation and exercise of the mind. Also the highest and most enlarged species of judgment, which is wisdom, fits men to judge more or less rightly in every subordinate department into which a knowledge of human nature at all enters; though not alone and of itself, in the greatest degree of perfection, in any one.

One principal branch of logic, therefore, which we shall endeavour to furnish in the course of the Second Book, will consist in a collection of some of the principal and most general laws of nature, such as shall be applicable to all subjects generally, and to the ordinary pursuits of life. It was intended to embrace a similar collection of the laws which are most requisite in two of the most important branches of knowledge. But these last are omitted.

These, however, can only be intended by way of example and illustration, and as an indication of what every one must do for himself in all the various departments and sciences. And even the most numerous illustrations must themselves be very imperfect, and wholly insufficient to build up and perfect a judgment in any one branch. For by far the greater and more effective portion of it consisting in impressions merely, which cannot be distinctly enumerated, the very largest collection that could be made must still serve the purpose only of example ; and be capable only of becoming the centre and nucleus round which all the more valuable of its materials must be collected and arranged. More advantage, therefore, will be derived from pointing out the causes and cure of the errors, which are continually made in the collection and use of these impressions, than in pursuing even the detail and enumeration that might be made. This would only carry us away from our principal design, by giving a too great consequence to one particular department. For it is an essential feature of truth that every subject should be placed in its own true

position ; and that exactly that degree of prominence should be given to it which its real importance demands.

The judgment is peculiarly and expressly exercised in determining the value and extent of our knowledge ; and the degree of certainty that it fairly warrants in each instance. This, however, is undefinable, and as multifarious as the subjects themselves which come before us ; and hardly in any degree reducible to the form of written principles and laws.

Judgment also weighs not only the value of the evidence, but the nature of the subject itself, and the degree of support and confirmation which it admits of, and requires ; and from the comparison of these two, it extracts the probability of the particular case. Judgment takes into its view and estimate, not only what it knows, but also what it does not know : that is, the probability there is of some circumstances being kept back, and of more information being to be obtained than is at present afforded. For apprehension discovers the amount of our knowledge : judgment, the value of it : apprehension, how much we know : judgment, how much we ought to know upon the subject in question,—and sets the apprehension at work to obtain it.

The probabilities of this sort in each kind of subject, are among the most important of the general principles and impressions, which are collected together and built up in the construction of judgment. More than an illustration, however, of such principles could not be given, without leading the attention astray from the main object, the causes and correction

of the principles by which errors in judgment are principally occasioned. At the very first view it cannot but be evident, considering the multiplicity of these impressions, their vague and shadowy nature; considering too, the nicety and fineness that is requisite,—the twilight vision also and almost blindness of the operations of judgment,—how ample a door must constantly be open for the influence and effects of prejudice.

From the same extensiveness of the field which it embraces, and the multiplicity of comparisons which its proper exercise requires; from the desire also which it continually creates after additional information, it is readily to be seen how judgment must essentially dispose to caution, and prevent rather than prompt to action. It is better to advance slowly in the direct line than rapidly in a devious one; especially since the greater the progress that is made in a wrong direction, the greater the distance from the truth, and the longer the path which must be retraced in the return from error. “The wise man,” in consequence, “has more ballast than sail.”

Since, the present law and disposition of the mind, whatever it may be, assimilates to itself all future knowledge and reasoning, and tends to confirm and strengthen itself, the grand and primary desideratum would seem to be some standard model, some fixed, perfect, and unalterable law and principle, to which we might safely conform our minds in the first instance, making it the pole-star of all our investigations. This it is quite impossible to obtain in every subordinate branch of knowledge. And in the highest

branch, till we can recognise and consent to adopt such a model and standard, if it has been provided for us, we must be content to use such imperfect modes of rectifying the law of our mind, as can be afforded by an analysis and exhibition of the causes of error which conspire chiefly to distort and to discolour it.

CHAPTER XII.

ANALYSIS OF ERROR.

ALL error proceeds from misapprehension, or misjudgment. From misapprehension,—as when we believe that the heavens are arched: that the earth is flat, and stationary: that pleasure and riot is happiness: that syllogism is a competent test of argument. From misjudgment,—as in the opinion that another thousand a-year, or a particular house or estate, would make us perfectly happy and contented: that our own taste is the proper standard: that our own work will obtain much notice and currency in the world.

Apprehension and judgment cannot be accurately distinguished in the use and operation. Judgment is exercised in almost every act of apprehension; as in the above examples, the errors and correction of which depend upon judgment and experiences respecting the deceptions of vision: the deceitfulness of the passions: and in judgment also respecting the elusive nature of fallacy and truth, as well as in the apprehension that syllogism begs the question if it be an universal one, and cannot estimate the degree of probability, if it be a particular one. And apprehension also enters into every act of judgment; as, in the above instances,

experience of the effects of wealth, and of an appetite being indulged : of our own real value, and relative position and importance in the world. And every use of experience is an act of memory ; and is grounded, therefore, upon a previous exercise of the apprehension.

Perhaps judgment enters essentially into every apprehension of fact and truth ; except in the case of some of the simplest objects of the external senses.

Reason is the due and proper exercise of both these faculties : where both are needed. But there may be the exercise of reason, as in those cases in which the apprehension of the whole subject is distinct and complete, where there is no room for the use of judgment. And this even in argument. Which is exemplified in the pure mathematical sciences ; the subjects of which may be clearly and perfectly apprehended, being derived entirely from objects of an external nature. But there can be no exercise of the judgment entirely independent of the use of the apprehension. Every act of judgment, therefore, requires a full and complete exercise of the reason.

Now, since truth lies in minute differences, and in fine and delicate shades : since, at the same time, judgment is a habit, which is built up by small and constant additions, and is exercised chiefly in fixing the exact value of knowledge, and degrees of probability,—it may be expected that prejudice should hold over them a very sovereign influence and empire.

But here we must distinguish in respect to such opinions as are become habitual, being rooted by fashion and education ; lest it should be supposed that these

were the proper subject of logic, and that it might be expected of it to change and eradicate them in a moment, if erroneous. The fault here lies, not in the opinion itself immediately, as if there were no just grounds at all for the reception of it; but in the force and strength of it: in the degree of certainty and assurance which is attached to a belief resting principally upon the ground of habit; and in admitting more than a presumption of its truth. So far as this, many of our own opinions rest upon no stronger a foundation than those of Mahometans, and of some of the grossest idolaters. They are warranted in a presumption of the truth of their creed, till they have heard of another. But if reasons be brought against it, which outweigh this presumption, it is their duty and ours, to seek for other grounds to support it, founded upon better knowledge.

Now it is not the province of logic and judgment to annul suddenly such long established opinions. Few can stem the torrent of fashion and habit at all; and in these it must be done by slow changes; by gradually undermining the wall of confidence; and by small and repeated corrections of misapprehension and misjudgment, — so far as logic is concerned. It is the same with the law of the mind. Every man must have some fixed and settled opinions, as he must in like manner have a fixed and steady law of mind, to give a promptness, and firmness, and consistency to his actions. And it is better to act by opinions and a law not strictly correct, than upon a ground and principles unsettled and wavering. These must all of them be gradually undermined and corrected, and brought nearer and nearer to the perfect standard, so that the whole mind

may go round together, without losing, at any moment, its reliance upon a solid and stable principle.

But the proper province of judgment is the business of life, and the government of the conduct: the momentary and continual judgments upon everyday occurrences: the decision upon action, upon events, and men: the first incipient conjectures and theories, whose fault is in their rise and momentary growth, and which, when once matured, can hardly be eradicated: the impulses of the thoughts and passions to sin, whose suggestions must be nipped in their very first bud; for when grown and strengthened they cannot be resisted any more than deep-rooted opinions: the formation of habits; which must ever be gradually created or destroyed by very small additions and changes.

Now with such qualification, and within such limits, it will be found that misjudgment in general, and misapprehension in a very great measure, have their principal origin and growth in prejudice.

The confidence engendered by habit, fashion, and education, what is it but prejudice? The confidence in our own taste and judgment, as if it were the infallible standard and beacon to the world,—being that which prevents the rectifying of most of our errors,—what is it but prejudice? Since all nations mutually ridicule the customs of every other which differ from their own, prejudice must be the foundation of this judgment. Since we ridicule past fashions, and new fashions which we soon afterwards adopt, and shall do the same by the present fashions when but a few years out of date; this must be prejudice, which disposes us blindly and ficklely in favour of our present custom. It is prejudice which

has caused every nation and sect to esteem distant nations, and people of a different religion, as barbarous, weak, and ignorant: the Jews and Greeks to despise each other mutually, as gentiles and barbarians: which causes us to esteem what we know, to be all that is to be known: our own circle to be the world: the world to be the centre of the universe; and it was the correction of such a prejudice which enabled Copernicus to conclude that the earth was not the centre, and Columbus that the known world was not the only world.

These instances have all of them been taken from within the province of judgment. But even apprehension is in a most remarkable degree under the resistless tyranny and dominion of prejudice.

We have known a connoisseur deny the testimony of his own eyes, that a scene on the stage of a theatre exhibited the appearance of a down-hill view, when pointed out to him from the highest gallery,—from a prepossession that it was impossible in painting to produce such an effect; and an ignorance that this seeming and often asserted impossibility arises from the circumstance of pictures in general being small, and hung above the eye, and the apparent place of any point in a picture being in a prolongation of a line from the eye to that point. This law of perspective therefore places the object above or below, on the one side or the other, according as the eye of the observer is below or above, on the right or the left side of the picture. Geologists, craniologists, astronomers, anatomists will often deceive themselves from prepossession into a perception of objects which no other human eye

can discover, as if gifted with some faculty of second-sight. And if such deceptions can be practised upon the external senses, how much greater and more despotic an influence must prejudice hold over the operations of the internal senses, and the apprehensions of the mind and moral faculties.

It was prejudice which was guarded against in Nathan's parable, by the skilful introduction of a third person, to counteract the effects of self-partiality. The same in the case of the countryman, when he informed his landlord that his own bull had gored his landlord's cow ; but the real fact was the reverse. It is prejudice which blinds the eyes of many critics to all beauties, but opens them wide to errors and defects : which disposes one person to look only upon the good, another upon the bad side of character and life. It was prejudice which blinded Paine's eyes upon every topic of religion and politics, though otherwise a man of very powerful understanding. It is prejudice which persuades the miser that gold is wealth ; the political economist, that wealth is the well-being of a nation. It is prejudice, and partiality in behalf of his favourite and engrossing study, and a worship of the wonders and mysteries which it developes, that blinds the eyes of the anatomist to the insufficiency of the animal mechanism to the production of life, and disposes him to materialism.

Lastly, it is prejudice, and partiality in favour of our prevailing pursuit, which dictates all metaphysics ; which disposes us to find in one branch or science, the principle and arrangement suited to another, and to

reduce a subject to a method and system, in no way adapted to it; which led Aristotle to reduce all logic and reasoning, Kant the universe of mind as well as matter to mathematical forms and abstractions.

It seems to follow, as a corollary, that judgment itself—the law of the mind—is a prejudice; for it is a habit of viewing things in a particular light.

There is a general law, a judgment, which makes a man in general wise,—especially in matters of life, conduct, and morals—which are the proper province of judgment; for there is less of judgment and more of apprehension in physics. And there is a particular judgment in each branch and subject of knowledge, as religion, morals, politics, merchandise, medicine, law, good manners, fashion, and in fine art—which is taste.

We must live and act by prejudice. The thing we must aim at is, to have a good prejudice: as we must live and act by conscience,—and we must strive and trust that we have a good conscience. Conscience is the religious judgment and law of the mind. A good habit of thinking and law of the mind, is not called prejudice. Being well regulated and balanced, it is called unprejudiced, and freedom from prejudice. Still it is a habit.

CHAPTER XIII.

ANALYSIS OF PREJUDICE.

PREJUDICE has its foundation in evil passions, in defect of principle, and of moral character.

A leading evidence and example of this, is afforded in the well-grounded and almost proverbial observation, — ‘He has told it so often, that he believes it himself.’ This shows clearly and very sufficiently, the effect which want of truth and integrity may, and does produce, upon the opinions and judgment; and the influence which falsehood of the tongue and of the heart may hold over error of the mind. The very essence of truth is to speak the truth. To perceive truth we must practise it.

The above remark is generally made in relation to facts; which are, however, only the extreme case. But the same prejudice operates under every variety of shape and of degree, till its presence becomes quite undiscernible; yet its influence is the greatest and the most extensive, and therefore the most prejudicial, in its latent and least obvious and perceptible forms. The listening readily to falsehood and fictions, and allowing them to be repeated to us, is an admission and encou-

agement of the same prejudice. The dwelling constantly upon an idea, and wishing the truth of it, is a repeating of it to ourselves.

Through this means, a partiality for our own cause and interests easily operates, so as to enable us to see and to believe every thing that we wish. The habit of speaking in hyperbole, with exaggeration, and with certainty, operates in the same way; and infallibly distorts our own views and apprehension of truth. Nothing can safely and securely guard us against the force of these latent and insidious self-attacks, but the most rigid and strict observance of perfect truth, integrity, and uprightness.

The prejudice which attributes superior importance and value to our own circle, knowledge, taste, and opinions; which teaches us to call distant nations barbarous, and foreign customs ridiculous, is founded chiefly upon vanity and self-love.

The inordinate passion for theories, and new systems, which leads astray the greater part of the enlightened and inquiring world, is pride of knowledge, conceit and vanity.

Pride is the foundation and support of scepticism: of that spirit which disposes us to reduce every operation and phenomenon of nature to uniform law, cognisable by man, neither requiring nor admitting of any providential care, or special interference. Because such is most suitable to the capacity of our own mind, and the ultimate object and perfection of human contrivance, as affording the greatest relief to our idleness and weakness, therefore, we call it sublime — this

mechanical system, adapted to our own calibre and infirmity ! Thus we make a few discoveries in anatomy, or meteorology, and start forward at once to the conclusion, that if we could pursue this system to the end, we should arrive at the same, or similar causes, for every phenomenon. But the wisest among us cannot define those circumstances, under which it shall be certain that the weather will be fine, that the body will be healthy or alive, to-morrow. Still less are we capable of ascertaining at any time, that these circumstances exist. There may be immutable laws, and there may not ; but what but pride can prejudice the understanding so as to prevent a confession of its ignorance, and dispose it under such circumstances to oppose conjecture to revelation ? The humble mind, the honest, the simple and sober mind, confesses its real state of ignorance and inability ; and confessing its ignorance, the natural appetite and thirst for knowledge compels it gladly to accept the repast provided by revelation, and to believe implicitly.

The prejudice, which, upon the occasion of some new discovery, or of the correction of a former error, disposes us to a boast and confidence of knowledge, rather than to a renewed conviction of our fallibility and ignorance, is entirely vanity.

The proneness of criticism to the perception of faults, is jealousy and malevolence ; and is frequently exhibited by unsuccessful and disappointed artists. We have scarcely yet met with the person who is prone to a fault and prejudice, to the perception of virtues only.

It is avarice which occasions the miser's fallacy :

appetite that of the epicurean ; the one esteeming gold to be riches : the other, the quantity of pleasure to be the measure of happiness. The same self-love, and undenied passions, which originally led them to place their happiness in self-indulgence, have continually narrowed and debased their understanding to such a further extent, as to blind them even to the perception of the best means of attaining their own little-minded object.

It is avarice, also, that dictated the infatuated search after the philosopher's stone ; the pride of reason, the conceit of a panacea, and the more recent phantasm of the *anima mundi*.

It is true, however, that there are infirmities natural to the mind, and prejudices and dispositions inherent in human nature, which forcibly lead to error, and yet cannot, immediately at least, be attributed to want of principle, and a defect of moral character. Such is the disposition to simplify nature, which is a prejudice natural to the most ingenuous mind ; by which, for instance, it searches after one prevailing cause or indication of the weather, such as the moon, or the wind : one cause of insanity, as ill-health, or vicious passions : one law suitable to all time, and to the whole universe. But even this cannot long exist, or operate to any very prejudicial extent, consistently with perfect uprightness and self-possession. It is a prejudice which quickly hurries the mind to pride and elation, and eagerly repels the sense of ignorance. Truth and impartiality cannot fail to discover the repugnance of nature to such measures and system : which are a mere human instrument ; and real humility and ingenuous-

ness must quickly confess their utter insufficiency. The pride of reason never makes it its study to fix the limits of human capacity ; which would be the first and favourite endeavour of the mind, if it were perfectly pure and ingenuous.

There are natural and inherent prejudices of the senses ; such as that by which heights appear greater when seen from above, than from below : — of observation : as that by which the attention is chiefly directed to the differences of objects presented to us, and to the resemblances of such as are absent or far apart. These, however, are errors only of first impression, and chiefly in external objects ; which do not, therefore, enter with any paramount influence into the highest subjects of wisdom and logic.

The preference which the mind shows for evidences and information agreeing with its former prepossessions, though natural, is nevertheless, a species of vice and partiality. It is dishonesty and disingenuousness to reject opposing and conflicting instances : it is treachery also to omit the mention of them, as is practised by most theorists ; since the mind is easily riveted and engrossed by present examples, and may soon be hurried away to the greatest length when it has once been caught.

It is another natural and necessary prejudice, to give preference and priority to present objects, and to suffer them to outweigh all such as are distant, whether in time or place. The present impressions of sight and sense eclipse those which dwell upon the memory only ; objects of present and immediate interest, those of faith, expectation, and hope : in the same

way analogously as the nearest objects, by the laws of vision and perspective, occupy the greatest portion of the canvass. Yet this is at the bottom of all vice and immorality: the very root of idolatry. The present pleasure, the present passion, the present and palpable objects of external perception, outweigh the future fear and hope, the distant, intangible, and imperfect idea, which is cognisable only by the internal senses. Did it not ally itself to the ascendancy of the passions; did it not essentially tend to narrow and prejudice the mind, to corrupt and to debase the character, there had perhaps been less awful threatenings and denuncements against the worship of God in the host of heaven: less sin and gross corruption, in bowing down before a star, an image, or a picture. But the mind is captivated and enslaved by such acts; it is led to accommodate itself to, and to place its wishes and reliance upon things present and things human, instead of upon things absent, invisible, and divine.*

These are all of them vices of the mind; and as such, ought to be corrected. They are intimately connected too with the vices of the heart: delighting to dwell under the same roof with them; and mutually to confirm and strengthen one another. Moreover, if we permit but one vice of any kind to remain uncorrected,

* Greatness of mind, greatness of judgment, greatness of will and motive, greatness of character—religious, moral, mental, and philosophical, are in proportion as the distant, the invisible, the unseen, and the eternal, are made equal in influence and apprehension with the present, the visible and the tangible. Apprehension only of the present, in time and sense, is vicious.

we are so far enslaved and weaker in character, and less competent to master or compete with the rest.

The passions of the heart, even the worst of them, are natural, no less than the vices and imperfections of the mind ; and it is equally a duty incumbent upon us to correct them all. The neglect and failure of this correction proceeds mostly from self-indulging idleness ; itself one of the greatest of all vices, and the fruitful nurse of every one of them. The subjugation of evil passions, and the remedy of the natural defects and infirmities of the mind, are the subject of one and the same act of self-conquest and self-denial, — the strengthening, the improvement, and the growth of the character.

Some prejudices, however, it must still be seen, are in a greater degree than others consistent with uprightness and purity of character ; though none are entirely so. Prejudices of early association, of education and nation, are of this kind. For these no logical lessons can be given except enlargement of mind and experience : with correction even here of indifference, self-confidence, and self-love. The prejudices, however, which operate in moral science and practice, and lead men chiefly astray in religion, in conduct, in their judgments upon men and life, are all of them more or less immediately associated with integrity of principle and of the heart. The vanity of theory, the pride of reason, the selfishness of opinion, the malice of criticism, the want of truth, in professing knowledge, in exaggerating and mis-stating reality, in indulging the thought and desire of what is false,—take away all these sources of error, operating upon first impressions,

upon balance of judgment, upon present impulses, thoughts, and opinions,—and we shall certainly remove the principal foundations of error in religion and morals, and probably those also chiefly and most strongly operating, in the whole circle of the sciences.

Another, therefore, and that the principal and most important topic of the Second Book will be, the classification and arrangement of the prejudices; and the reduction of them respectively to those passions, and defects of character, in which they chiefly originate.

CHAPTER XIV.

CHARACTER.

SINCE error is resolvable into prejudice, and prejudice into defect of principle and character, it becomes a matter of consequence to determine which faults and passions are chiefly to be corrected, as having the greatest influence within the province of judgment; and what are the best means of effecting this object.

It is not every evil passion that equally contributes to vitiate the judgment. Neither is it every virtue that will effectually tend to perfect it. A person who is highly religious, and upright in most respects, may have a bad judgment; and this is frequently found to be the case. Sometimes eminence in particular virtues tends to increase certain bad passions; and in general, those more especially, which militate the most forcibly against sound judgment. Particular subjects also, are more liable to injury from particular prejudices: to the influence, therefore, of one bad passion more than of another.

Neither can the improvement of character entirely change a naturally bad judgment to a good one, and infallibly place all those who have cultivated it above the rest of men in judgment and wisdom. Judgment

is a natural gift and endowment, as much as any other ; the most rare too, and the most valuable of any. Art and science cannot overcome altogether the natural inequalities of men in this respect. But as we are born with different passions and dispositions, which it is our duty to correct ; and many are able so far to improve them, as to destroy in a great measure these original differences : so it is also with logic and judgment. And at least we may confidently venture the assertion, that no one will subdue or correct any single bad passion, above all, no one will attain a step in the path of self-conquest, which is the chief corner-stone and foundation of character, no one will become a better man and a better Christian, without at the same time very materially improving his judgment, whatever it may have been, beyond the natural measure of it. And there is no better means.

One principal object of this work is to raise the estimate of *character* above that of *talent* ; and to convince the world, hitherto idolatrous worshippers of genius, that character will stand them in better stead, even in the matter of wisdom and judgment. It requires no superior power and penetration, or great perfection of character, to verify the truth and force of this principle. On the contrary, the experience of our own deficiencies will best supply the materials requisite for this discovery and verification. Any one who will acquaint himself with his own weaknesses, and impartially examine the diseases and remedies of his judgment, independently of former systems, and calmly observe the slow and steady progress and effects of character among men, as compared with the results of

mere genius, will be ready to see and to confess the firm foundations upon which this doctrine is already established. The force of character will ultimately prevail over the force of talent, learning, and philosophy. The foolishness of this world, the weak, the contemptible, shall eventually triumph, and fully and effectually confound at length the strength and wisdom of it.

Of this we have in some degree a faint evidence and a foretaste, in the innocence and simplicity of children ; which frequently dictates the justest possible remark, and an apparently very clever and sensible answer. The reason of which is, that they are purely unsophisticated, and without design, and without artifice ; and that they take things in the view in which they really present themselves, without regard to interest or consequences. So, often too, with the simple and the thoughtless countryman ; especially among the Irish.

Folly too, has often been the most appropriate garb which true wisdom has found, and in which it has thought fit to clothe itself, when its best counsels and the exhibition of the naked and unwelcome truth, have been the most strongly needed, in times of difficulty and danger.

Now, since one of the most leading prejudices is the strengthening of belief by the repeating and dwelling upon welcome opinions,—for dwelling upon an opinion is repeating it to one's self,—the first requisite in character, therefore, as a shield from error, is truth and ingenuousness. And this is exercised principally in fixing the limits, and in narrowing the appearances of our own knowledge.

Since the vanity, also, and pride consequent upon knowledge, are the next in force of the winds and currents which render our course devious, these passions must be effectually removed and conquered.

The selfishness of opinion, and the jealousy of criticism, are also among the first in influence of the passions which distort the judgment. Pride therefore and selfishness, the love of superiority and the love of self, are two passions which chiefly and most earnestly require our notice and correction. But even the selfishness operating in these cases is principally exercised in the love of triumph, of superiority, and victory. So that modesty, in effect, and simplicity, and child-like humility, is the first and most essential requisite towards the object we are in search of: a quality which has been confessedly and eminently conspicuous in those who have trodden the very highest walks of wisdom.

But this humility requires to be exercised under some of the most difficult and galling circumstances that can possibly surround us, and such as are most especially revolting to our prevailing dispositions. To be famed for wisdom, and at the same time to profess the very narrow limits of it: to have your knowledge and opinion revered, and to confess in the same instant, the shallow grounds of them,—so much less than the supporters of rival opinions are forward to profess: to qualify truth, till it loses all prominence of feature and character: to see it triumphed over, and eclipsed by theory: finally, to forbear your own opinions, and to look for what is wise and valuable in others, and be an habitual learner:—these require a firm courage, a

manly resolution, and fortitude, a lion's heart under the plumage of the dove, which cannot be exercised but through a perfect self-command, an utter, and implicit self-conquest.

This is the means towards that character which is required for the overthrow of error and prejudice. And it may safely, therefore, and truly be said, that the greatest of all difficulties is to be overcome, the greatest of all triumphs and victories is to be achieved, as the requisite step towards laying the foundation of sound sense and judgment : which is true logic.

CHAPTER XV.

LOGIC OF SCRIPTURE.

It is worth our while, at this point, to pause for a moment, and to compare the present result of our inquiry with what is found addressed to us upon the same subject in the revealed word of God, since it cannot but tend to increase greatly our confidence in the opinions here elicited, insomuch as they shall be found to have any coincidence with the doctrines of divine truth.

Now there is scarcely any doctrine or precept of our Saviour more distinctly and strongly stated, than that the capacity for judging of, and for believing His religion, depends upon the practice of virtue, and the excellence of the moral character.

A most distinct enunciation of this truth is contained in the sentence, — ‘If any man will do my will, he shall know of the doctrine whether it be of God.’

That frame of mind, and that store of knowledge, and that condition of the understanding, which is suited to the forming of a just judgment respecting religion, is best maintained and cultivated by a practical experience in its precepts. ‘I am the light of

the world : *he that followeth me* shall not walk in darkness ; but shall have the light of life :’ that is, the understanding which is capable of believing and of appreciating the truths, which shall lead him to everlasting life.

The same instruction is given to us by the author of *Ecclesiasticus*, when he tells us from his experience, that ‘He that keepeth the law of the Lord, getteth the understanding thereof.’ For to practise is to apprehend in the first intent : and to apprehend, is to know and to comprehend : and to know and comprehend is to appreciate : and what we once do but value and appreciate, we are the next moment ready to believe.

It is not less clearly and expressly revealed to us, that it is the defect of character and principle which disposes to unbelief. ‘Men loved darkness rather than light, because their deeds were evil.’ ‘Every one that doeth evil hateth the light.’ And what we hate, and do not wish to contemplate, we are not far from disbelieving.

The doctrine of our Saviour goes still further ; and even points out the particular passions and faults in character, which are the most destructive of sound judgment. ‘How can ye believe,’ he says, ‘which receive *honour of one another*, and seek not the honour which cometh of God only ?’ In which sentence He informs us, that selfishness, and ambition, and vain-gloriousness, are the passions the most strongly tending to prejudice the judgment and opinion in religion. He pronounces also, in reference to His own conduct and

example, that humility, submission, and an entire freedom from interest and selfishness,—that humility and submission being founded upon implicit obedience to God the Creator,—are the true rudder to guide us to truth in reasoning, when He makes this declaration : ‘ My judgment is just ; because I seek not mine own will, but the will of Him that sent me.’ Job, and the Psalmist, and the author of *Proverbs* and *Ecclesiastes*, confirm the same doctrine, in the often-repeated precept, ‘ The fear of the Lord is the beginning of wisdom.’ And the whole sum of the logic of religion and revelation, namely, that its laws and precepts are at the same time both the end and means of wisdom, is contained in this expression, answering at once all search and inquiry, ‘ Thy word is truth !’ The same proposition is expressed by the words of St. Paul, ‘ With the heart man believeth unto righteousness.’

It is also worthy of especial notice, that neither our Saviour Himself, nor the general tenor of Scripture, holds out any expectation or makes even an attempt at enforcing proof and conviction by mere reasoning. He Himself addresses persons only of the proper turn of mind, saying to his mingled auditors, ‘ He that hath ears to hear, let him hear.’ And He rather withholds His doctrine from such as are incapable of it, by speaking in parables. Those who were silenced, and durst no longer ask Him questions, were not a whit the more convinced ; and He knew well enough that, ‘ If they heard not Moses nor the prophets,’ neither would those men be any the more persuaded, though ‘ One rose from the dead.’ All which shows clearly that no

proof or reasoning whatever is definitive, and infallibly convincing, unless the heart and mind be previously well prepared and properly cultivated.

So impotent, indeed, is reason alone, and so blind are we to proofs which we do not wish to comprehend, that the strictest and most religious of all the apostles, (that is, previous to their conversion), the one most earnestly desirous of the truth, and the most zealous of any for God's glory, Saint Paul himself could only be converted from his once rooted opinions, by a miracle.

It is evident then from the examples and tenor of Scripture, that religion is not properly to be made the subject of direct proof; and that the practice of virtue, and purity of character, are the proper and most essential groundwork of a sound judgment,—in religion at least.

An argument of some weight may apparently be drawn, in opposition to this conclusion, from the excellent and eminently amiable characters of some professed sceptics; and the comparison of these with the pride and uncharitable selfishness of many religious enthusiasts.

But the benevolence of such cavillers, and men of philosophic disbelief, the effect perhaps of a naturally amiable disposition, or of great strength and cultivation of mind, will not, upon intimate acquaintance and analysis, be found coupled with real humility and disinterestedness, or freedom from vanity. Even the appearance of it, however, is rare, and an exception, among such persons; and the opposite is the rule and general experience. Moreover, the naturally candid and amiable disposition cannot but be gradually un-

dermined by the constant practice of disbelief, even though it be the effect chiefly of habit and education ; or else it must eventually expel scepticism.

As for those who are altogether uncharitable and uncompromising, with great show, and warmth, and confidence of religion, these cannot have a proper and solid foundation for their confidence in Christianity, nor any real and perfect apprehension of the Christian truth. They must be believers chiefly from caprice, or partisanship : who continue in their opinions from conceit ; and their religion can be worth but little more to them than image-worship or Mahommedanism.

CHAPTER XVI.

CONCLUSION. REFLECTIVE AND PROSPECTIVE.

IF truth then has been truly and justly considered to be "a fine and narrow line," and apprehension in "the first intent," to be alone capable of fixing it with certainty, a conviction on these points cannot but dispose us to a greater caution and diligence in the pursuit of knowledge ; and a less inflexible confidence and security in our own opinions.

If judgment, too, is "the law of the mind," and "a habit:" which requires to be of a peculiar and exclusive character, to fit it properly to each different subject ; and prescribes a division of intellectual labour : the acknowledgment of this truth may lessen the ambition of individual minds after an universal empire of knowledge ; may teach men to confine themselves to the hope of excellence in one line ; and to submit without envy, jealousy, and mortification, with deference and teachableness, to the opinion of those who are better informed and instructed than themselves upon other subjects : which must greatly increase the uses and pleasures of society and friendship. It may thus, too, in the end correct the erroneous and baneful practice of pursuing one subject with a law of mind, and

by a method suited to another,—which, together with indistinct and biassed apprehension, is the foundation of all metaphysics, the deepest rooted and most prevailing cause of mischief in the philosophical world. And the necessity may at length be seen and acknowledged, of enlarging the attention of the world beyond the narrow worship of its present idol, the philosophy of physics.

The resolution, too, of error and prejudice into character, if it shall seem convincing, and the very ample room which has been shown to exist for the effect of evil passions, will afford, perhaps, a useful key and solution to the anxious doubts and apprehensions of some as to the causes of error and differences of opinion in religion; and may tend to raise in some measure the estimate,—would that we might say also the use and practice!—both of logic and self-government.

The effect of the whole will be, that much evidence, which is at present despised and condemned, will be admitted; that much which is now approved, and passes current, will be rejected and banished: as we shall endeavour to illustrate in the Second Book.

The judgments of men will be more enlarged and liberal; less selfish, less obstinate, less malicious and uncharitable. The wisdom of other men, and of foreign nations will be estimated as being more nearly upon a par with our own: self-love and self-opinion will no more be made to serve as the sole infallible standard and test of truth: the mould of our own minds, and our own narrow experience, will no longer be set up as the law and pattern to the whole world: nor will the testi-

monies agreeing with our own creed and sentiments be indiscriminately accepted, the opposite despised and rejected as contemptible. The whole field of truth, and knowledge, and experience, the whole world itself, both past and present, remote and absent, as well as near to us, will be looked upon and estimated with a more even, equal, impartial, and disinterested view.

In a word, it is to be recognised, that humbleness of mind is of all conditions the one which is most favourable for the reception of evidence, and the acceptance and appreciation of truth; and self-opinion, and conceit, are the very opposite in their tendency and effects: according to the proverb of the wisest man, "Seest thou a man wise in his own conceit, there is more hope of a fool than of him."

But the greatest and the highest pretension set up by the new logic, and the peculiar province which it arrogates to itself, is that of conduct and practice.

Not only is the exercise and improvement of character calculated to assist and strengthen the judgment, or logic of the mind; but reciprocally the new logic reflects its influence, and operates upon the formation and exercise of the character, and upon all the acts and resolutions which together build up the habits which constitute it. It alone of all the instruments which have been provided or suggested in aid of reasoning, is able to operate upon action, and moral conduct, and to act with a promptitude and precision sufficient to influence the passions and impulses which are the ground and motives of them.

Every action, however sudden and precipitate, is

attended with an exercise of judgment. But the truth does not end here; nor is it confined to subjects of mere temporary policy or inclination. Its principal province and operation are in the highest duties and interests which concern us.

No man commits a sin, till he has persuaded himself that it is not one.

If this be really the course and process of the mind in the commission of every bad action; and the judgment, which but a few moments before confessed the criminality, does in effect, in the moment in which it yields to the temptation, alter its decision; here indeed is a proper and sufficient, and an ample field for the exercise of logic, of an instrument of the most finished and the nicest workmanship: a scheme and process adapted to the measurement of ultimate and indivisible quantities and ratios.

But the mind does undergo this process, and the judgment this change. Rules and resolutions are made without reference to particular circumstances and situations, or to those peculiar qualifications which must be attendant upon every case. Most temptations then are yielded to, as will be discovered upon an accurate observation and analysis, upon the ground of some peculiar circumstances and exceptions, the weight of which is gradually increased and magnified, with the growth and strengthening of the passion, till it is sufficient to take the case out of the general rule and resolution, which still remains entire. Thus, caution and curiosity become a ready excuse for listening to a slander: the giving of pleasure, for display and vanity: for drunkenness and gluttony, goodfel-

lowship and friendliness: use, example, the force of particular circumstance, for incontinence. These suggestions and impulses must be checked in the very bud, and in their as yet almost imperceptible growth; in which state, no other instrument than such a one as is here suggested, is capable of estimating and counteracting them.

The enlargement of the mind which forms the groundwork of a true logic, giving weight as it does and authority to remote objects, cannot fail to increase the power and effect of those distant motives which resist the strength of the present passions.

Faith and confidence in the truths of revelation, the belief of things altogether absent and invisible, being the fund which supplies us the most plentifully, and with the strongest motives which we can use to rectify our conduct, is a principal and very essential subject and branch of logic. A faith and confidence growing and increasing continually, and gradually becoming more and more confirmed, till it attains to such a force and character as to enable us to act from duty only, entirely and implicitly, and without regard to consequences — convinced that the result will be the most proper and advantageous, however seemingly improbable — is at once the highest subject and the highest attainment, and constitutes the most important branch of a perfect logic and judgment.

It now remains for us, in the Second Book, to exhibit some of the aids and instruments towards the correction and enlargement of the apprehension. Next, to enumerate, by way of example and foundation, some few of the most prominent and general laws of nature;

being the materials of judgment. Lastly, to portray in their true character, and to refer to their proper origin, the various prejudices, which interrupt the free and perfect exercise both of the apprehension and judgment.

END OF THE FIRST BOOK.

BOOK II.

PART I. THE EXERCISE OF APPREHENSION.

CHAPTER I.

ANALYSIS OF KNOWLEDGE.

It is necessary, by way of introduction to the means of improving and enlarging our apprehension and knowledge, that we should attain to a clear understanding of the real nature of knowledge, and of its essential and necessary limits ; in order that our labour may not be bestowed fruitlessly, through our expectations being directed in an improper line. It will also be a great assistance to the judgment to be well instructed, upon what subjects and occasions it must necessarily, and upon what others it *may* exercise itself ; and which those are that it may not pretend to at all without probability of error.

We will therefore begin this book, the first part of which treats of the improvement of the apprehension, with a brief review of the nature of real knowledge, and of the means by which it is acquired : — which last are the subject of cultivation and improvement.

THE EXTERNAL SENSES.

WE may know and comprehend just so much only as our senses give us notice and experience of.

“Homo Naturæ minister et interpretæ tantum facit et intelligit quantum de Naturæ ordine re vel mente observaverit: nec amplius scit aut potest*.” No man’s actual knowledge can possibly extend a whit further than the evidence of his own senses, external and internal, can carry it.

Let us therefore now see what this knowledge is; that is, what the senses can give us intelligence of. And first, of the external senses.

Objects are different in kind,—that is, our knowledge of them is different,—according as they come under the cognisance of one or more senses. Thus, light is cognisable by the sense of sight only; heat and air, by the touch. Sounds and scents, likewise, severally affect but one sense only; supposing the source from which they proceed to be unknown or invisible:—Pain also, and sometimes pleasure of the body, when proceeding from no obvious or external cause.

All these are the subjects of distinct and perfect knowledge, as much as any other subjects in nature whatsoever. Unsupported as they are, and standing as they do alone, and unconfirmed by the evidence of any second sense, nothing can possibly be more true and certain than the real existence of these sensations which we so experience;—and this is all

* BACON, *Nov. Organ.* Aph. i.

that we can know in these, or any other generally considered more tangible subjects.

But the error, if any, which may exist, and which usually does exist in respect of these objects,—namely, those which affect but one sense only,—is, that we attribute more to the sensation than it really evidences; and feeling it to be as it were weak, and standing alone as it does, and unsupported, we attribute to it a relation to some other sense, with which we do not in fact perceive it to be connected. Here then is error, in attributing to such a simple impression a relation or consequence which has not been ascertained; or is not sufficiently warranted by experience. And hence also, from the frequency with which these relations have in such subjects been falsely assumed, and proved to be fallacious, the knowledge of things of this class has been supposed to be deceptive, and their existence sometimes altogether a fallacy. There is no error or fallacy, however; except in attributing to them an unascertained and groundless cause, or a presumed effect or relation, with too great certainty, and upon insufficient evidence of experience. Thus a singing in the ears is as real a sensation, and as certainly existing, as growing-pains, or an ear-ache; though it may be false to attribute it to the ringing of the church-bell, and thence to the death of a neighbour or acquaintance. Swarran, listening to the approach of the Irish army, exclaims, “What murmur rolls along the hill, like the gathered flies of eve? the sons of Erin descend, or rustling winds roar in the distant woods.” The sensation was a true one, though the sound itself might be attributed to a doubtful or improper origin. A

gnat floating in the air at a few yards distance, has been mistaken by the eye for an eagle soaring a mile high. The one of these was the effect of the perspective of sight, the other of the perspective of sound. But all perspective is delusive; and does not afford the ground of positive certainty.

The error in either of these cases was not in the sensation, which was real; but in the judgment formed upon an insufficient apprehension and experience. The rupture of a tendon is frequently mistaken for a violent blow upon the part. After looking for some time at an intense red, other objects will appear tinged with green; and so with all the other complementary colours. Yet these sensations of pain and colour are not in themselves erroneous; the error consists in attributing to them a false relation to some other sense, or to some other person or object; or in supposing that other persons receive the same impressions as ourselves, and that we should do so under other circumstances.

These impressions made upon one sense only, resemble greatly the sensations of the mind; than which nothing can be more real and certain, and incapable of error, so long as they are attributed to the mind only:—as love and happiness, the ideas of thought, invention and memory. Even our dreams and fancies, and the visions of madmen, have a real existence in the mind that witnesses them; and error in respect of them can only consist in attributing to them other relations and consequences which do not belong to them. So ghosts, and other supernatural appearances, have, with regard to the senses, an actual existence; and some of the relations and consequences which they

indicate may be real also ; such as death, or duties, and providential superintendence ; though other relations may be erroneously ascribed to them : as that they would be palpable to any of the other senses, or to the senses of other people.

Objects which are cognisable by the sense of touch, are cognisable likewise by some one at least of the other senses, and are synonymous with what are termed substances : with perhaps one or two exceptions only, —as for instance, the air ; which is cognisable by no other sense, and yet is a substance : though even this also is visible in the blue vault of heaven :—and heat ; which producing no discoverable resistance, is not acknowledged to be a substance. Sight and touch, however, are the senses by which in general we recognise substances, and those objects in nature which we deal with most familiarly, and respecting which we the most constantly communicate, and find a general agreement. Hence some people, by a strange symptom of confusion and cautiousness, have been inclined to doubt whether any things but substances really exist ; and others, following up the same train, have gone so far as to question the reality even of substances themselves.

Certainly the use of every additional sense assists in making us better acquainted with the objects of our perceptions ; and in the midst of our liability to error in attributing causes and relations to our ideas and impressions, every additional information respecting them, and every confirmation that they can derive, either from the testimony of the other senses, or the concurrence of other people's impressions and sensations, is

by a cautious mind eagerly sought after. Hence the doubt and misgivings which have arisen, wherever these confirmations are not to be obtained. But the existence of heat, or air, is not at all questionable, although their reality is unconfirmed by any second sense. These, however, have the confirmation of the senses of other people. But neither are the impressions which from their very nature can exist only in our own senses and feelings, as of pain and pleasure, and certain impressions of colour, less real and certain,—though they may be more liable to a misapprehension of their causes and relations,—because they are unconfirmed and uncorrected by any sense, or by the senses of any other person.

The objects which are from their nature cognisable by many different senses, are themselves liable to every degree of error and misapprehension, although an infinitely greater measure of information is conveyed, whenever the additional senses are brought into actual employment. For instance, the eye concurring with the ear would immediately, when the opportunity was given it, determine whether it was an army that was approaching, or, from the motion of the trees, that it was the wind which caused the sound, or whether the evening flies were in number sufficient to occasion it. In like manner, either the ear or the touch, or the moving ourselves into a different relative position, which is analogous to the touch, would prove for certain, whether we were gazing at a fly or at an eagle.

But these effects of the perspective of sight and sound, by which we judge of the distances and nature of objects, are precisely similar to those, by means of

which we form an opinion respecting objects which are capable of affecting one sense only. In the one case, the objects might be brought under the notice of another sense besides the one which is in exercise, in the other it could not;—but in both the opinion is formed from the recollection of how the other senses have been affected, when the one in exercise has been similarly operated upon;—and if the same conclusion is come to in both cases, namely, that they *will* be so affected, in the one case the conclusion is erroneous:—which arises from the former experience having been ill employed or insufficient.—As is the case when, on hearing sounds, or feeling pain, or viewing phantoms which have their origin in ourselves entirely, we suppose the causes and sources of them to be cognisable by the other senses, or by the senses of another person. The error is precisely similar to that of a mistake respecting the distance or nature of an object which would be cognisable by the other senses. The question is not as to its reality, or existence; but as to its relations merely, and its consequences.

Physical questions, and inquiries respecting the nature of objects, are mostly of this kind; namely, whether they can be brought under the cognisance of any other senses than those which they are generally known to affect. Such is the inquiry concerning light and heat; whether they can be proved to be capable of resistance and tangible:—concerning galvanism, electricity, magnetism, scents, &c.—whether they are fluids;—that is, whether they are capable of motion and of occupying space, as those substances are with which we generally compare them, and which are

called fluids. The curiosity of our minds concerning spirits is, whether they can be brought under the cognisance of any sense whatever; and whether they can perceive or be perceived in any measure by senses like our own. The moment we are satisfied that they can have no relation at all to our senses, we give up inquiry; and the mind is at rest. All idea or opinion that we may afterwards entertain, in respect to their actions and feelings, can no longer be the subject of discovery and knowledge, but is an act of faith.

There are some things then, which are not cognisable by any sense whatever. There are other things which are cognisable only by one sense. There are some things again, which are cognisable by two senses, — as solid substances generally; and these again, by the addition of sound, taste, and scent, may become cognisable at the same time by all or any of the senses.

The actual existence of all these objects, except the first class, is equally without doubt. There is the same reality in the impression, whether one sense only, or more be affected; and the sensation of pain is equally certain, whether it be produced by a wound or by nervous affection. Respecting the existence of objects themselves there can be no doubt therefore; so long as we confine ourselves to the immediate objects and perceptions of the senses, external and internal. Respecting the truth and justness of these impressions, and the opinion which is formed from them, a further question arises; and this is the only difficult and important one. Of the object or impression itself there can be no no doubt; but whether the sensation of pain

be produced by heat or cold, whether the flash of light were caused by a sudden blow or by lightning, these may be questions of doubt and consideration, to be solved by experience, and the accompanying circumstances. Such also is the question, whether the figure before us is a phantom ; that is, whether or not it would be sensible to touch, or to the sight of another person ; whether the object viewed by us be near or distant ; whether the colour seen be original, or caused by the proximity of some other highly-coloured object.

The confirmation (not of the reality, but) of the truth of our perceptions, and of the justness of our opinions respecting these things, consists in the experience of any of those relations, or concurrent effects or consequences, which we were led to expect from our supposed knowledge of their real nature ; and the use of all these means of verification, whether of actual experiment, or the testimony of other people, is the enlisting as it were of additional senses, for the increase and improvement and correction of our first knowledge and impressions. For though the reality itself cannot be increased, the truth, and justness, and certainty, of the impression and of the opinion founded upon it, is wonderfully confirmed and improved by the use of each additional sense and testimony which can be brought in aid of it. If in a dream, or by a vision, we were to be circumstantially forewarned of a distant event or danger, which at the time appointed, occurred in all points exactly according to the prediction, we should be confirmed in our conclusion in favour of its being a divine interposition ; since no human cause or

ordinary operation could be compatible with it. So in all other things, it is the general concurrence and correspondence, and consistent course and order of events, through all their various, and multiplied, and intricate links and combinations, by which our opinions and judgments respecting them are confirmed and verified.

Thus the knowledge of a person's handwriting whom we have never ourselves seen, is formed and verified by means of a long series of correspondence and transactions, in the course of which no mistake has arisen; and the true apprehension of a signal is verified by the consistent operations of ten divisions of an army.

There are two things only upon which truth and reality depend, and by which they are verified:—sensation,—and the consistency of those sensations.

How are we assured that other men have existed and do exist? The same sensations and consequences follow, consistently with our own expectations and with one another, as if they really did exist; and which could not possibly follow consistently with their not so existing. Our own senses would otherwise contradict themselves. Memory would contradict itself, when we rely upon events, the existence of which is alone consistent with present appearances, and yet our own memory gives us no intelligence of them. How then could they have been brought to our minds otherwise than through the existence and presence of those persons who have described them, at the time and in the situation in which they are said to have taken place? On the other hand, at the same time, and

by the same testimony, other events are spoken of as having occurred in our presence, of which we have a perfect recollection. Invention would contradict itself, when we hear or read the works of other men, which our own invention is incapable of composing.

If the external world did not really exist, our memory and invention would also be continually contradicting themselves, when by a voluntary change of place we recognise ideas and objects, which we ourselves have no recollection of having ever before seen, and are incapable of inventing, but of which other persons have given us descriptions which are thereby fully verified. The sum of all which is this, that truth, and agreement, and consistency,—that consistency which does in fact attend upon our sensations, external and internal,—is compatible only with the real existence of other men and the external world, in accordance with our general belief and convictions concerning them.

All the proof, it is true, as well as the sensations and opinions, centre in ourselves; it being the concurrence and consistency of our own actions and impressions entirely, which verify our belief. So that each person contains as it were the whole creation, that is, so far as he is acquainted with it, and all the proof of it, in his own mind; and is, as was before said, an universe in himself.

But other people also talk and act, and appear in all respects as if they were exactly under the same circumstances as ourselves; and, consequently, were each in like manner an universe within himself. So

that in effect,—though an universe in myself,—I am the same only as if I were one in an universe : one single, insignificant individual of a countless multitude of millions of millions. So that,—whether it be true, or whether it be not true, in regard to other people, and with respect to other people's thoughts and feelings, I care not :—but I have returned to the same point from whence I set out,—namely, that to me at least this universe exists,—the world, together with all its parts and inhabitants,—the same pains and pleasures follow, in expectation and experience, in this world and the next, as if they did so exist. And if I were for a moment to believe that they do not exist, I must give up all that plan and principle of mind, of thought, and of action, by which I have been heretofore guided, upon which my pleasures and pains have depended, by which I have judged of the relations of things, their effects and operations ; and I must no longer consider any action or aspiration, otherwise than as a sudden and independent impulse, devoid of plan or purpose of any kind, of connection or consequence. But all the while, if I did so, all these plans and purposes, effects and operations, connections and consequences, would continually surround me, be present with me, and constraining me ; and I should be a lie to my own sensations, convictions, and experiences.

THE INTERNAL SENSES.

Whatever doubt or question may be entertained respecting the existence of external objects, none what-

ever can exist respecting the reality of the subjects of the internal senses. The sensations of love, joy, displeasure, anger,—the ideas of perception, thought, invention, certainly exist; they are our own existence, are existence itself. They constitute the mind, that is, the whole idea and knowledge which we have of it: of mind, which is the most real and certain thing in nature. Every thing whatever is referred to our own mind; every thing exists, every thing is elaborated, every thing is changed or continued, every thing is verified, every thing is made consistent, in our own mind. As the spiritual world, the world of faith, of hope and promise, the world which is not cognisable by our present senses, the unseen, the future, is more real and lasting and unchangeable than the present, the visible, the material, that which is usually considered more real, because present and tangible to our corporeal senses, though it shall in the event of time and providence wholly pass away, together with the senses that took cognisance of it,—so the ideas and thoughts and processes of the mind are more real and certain, are less fallacious, and will last longer than those of the body, surviving and ultimately placing in contempt the material frame of nature.

Each person's mind, therefore, is complete in itself; the most perfect, real, and sufficient thing in the world with which he is acquainted. Each person, if he were properly endowed, and entirely freed from misapprehension and prejudice, might form within himself, and from his own mind and sensations, a complete and perfect system of moral and intellectual philosophy, sufficient to himself, and for his own purposes. But,

for the purposes of communication and instruction, also for the purpose of correcting those prejudices which would otherwise obscure and weaken our knowledge of ourselves, under our existing imperfections, the necessity arises of comparing our own minds with those of others ; and finding them to correspond in their effects and operations, we conclude in general that there is a perfect resemblance. Since this comparison also is necessary for the purposes of the general intercourse and operations of life, which are entirely founded upon and guided by it,—also since these, as well as all the scenes and objects of the external world, are apt to occupy and engross us much more deeply and constantly, than the internal world and matters of reflection,—we come to the supposition, through the influence of this habit, that those points in which different minds agree, are necessarily more real, than those in which there is any difference ; and that the correspondence of thoughts and sensations and motives is the test of their reality. And the use of this criterion is in some degree necessary, both because such comparison is requisite to engage and to direct observation, and to restrain the mind from prejudice, and because error and instability of mind are sure to show themselves in such a disagreement ; which furnishes on that account the easiest and readiest test of madness, and of all those inferior stages of error and prejudice which are but an approach to it. Yet the truth of the mind is independent of this comparison and agreement, and might exist without it ; and does so exist, whenever some great moral discovery or improvement, such as the doctrines of Christian love, and

of the Cross, for instance, is for the first time put forward: which improvements are always checked and retarded in their advance by the use of this necessary though fallible criterion, and by the certainty of the imputation which must always attend upon those who first deviate from the path and channel which is prescribed by general opinion and experience.

The mind itself, therefore, is the most real and fixed, the most perfect and sufficient thing in nature; (the internal senses being that to which all things are referred, and from which all proofs of them proceed;) which, though it is fallible and liable to error like all other things, is capable of becoming a perfect, consistent, and sufficient world within itself, regardless of the question as to the outward world's reality; and giving reality and stability to external nature by its own stability and consistency.

The subjects of internal apprehension are distinguishable into two kinds: the one of them being more peculiarly and purely mental; the other in some degree of a mixed nature, both mental and corporeal. The latter are the passions and emotions generally, which are the subject, as it were, of a kind of internal touch; and affect both the mind and the body simultaneously, by some intimate connection or sympathy. The former are the subjects of what are termed the faculties: being the ideas and impressions which have been derived through the external senses, or the emotions before mentioned; all which are received into, and treasured up within the faculties of thought and reflection and memory, and employed by them for the various purposes of action and reasoning. All

these subjects of internal sensation, are of equal degree in respect of certainty ; and together form and constitute the real and perfect man, his existence and identity.

Memory is a faculty which is distinguished in a very peculiar manner from the rest of the internal senses. It is a sense by which we perceive and dwell upon events and objects that are now past and distant, which have at former times been near and present to us.

The apprehension itself possesses a kind of memory, by means of which the subjects presented to it rest and dwell upon the mind for a certain length of time, which is more or less controllable by the will, and which generally is continued until some other idea or object engages the attention. It thus draws out and connects together the succession of ideas, much as a quickly passing missile or meteor so dwells and lingers upon the external sense of sight, as to seem to be a continuous line. But the memory properly so called, is only that faculty by which we recall those subjects which have once been dismissed, and the idea of which has been entirely disconnected from the object which originated it.

This separate and distinct and independent faculty, operating like an improved, additional sense, so as to give the mind a telescopic view into past time and over distant events, is not more than any of the other senses liable to error as to the immediate subjects of its notice and attention. The ideas which it presents to itself, have without fail been at a former time present

to the apprehension ; though with respect to the form and circumstances and relations and accompaniments, as to whether it were by sight or description, by dreaming or invention, under such and such circumstances of time and place, respecting these there may be doubt and mistake. For the purpose, therefore, of practical and just conclusion, and the effectual use of the abundant materials which are furnished us by this most important sense, we look for an enlargement and verification of our experiences from the agreement of events and circumstances, and the consent and conduct of other people adopting and confirming them ; much in the same way as the external senses co-operate with one another, in correcting and verifying the first impressions.

Experience, which is the faculty by the use of which chiefly we judge and reason ; upon which for the most part we found our conduct and expectations, and determine all questions of policy, expedience, and probability, is founded entirely upon memory ; and is the application of it. But it is a kind of cultivated and discriminating memory : a memory formed by habit, and pattern, and principle ; and endued with a certain fixed tone and character, which renders it applicable to choice and conduct, to subjects of hesitation, doubt, and difficulty : as has been already more fully treated of, in the chapter upon Judgment in the First Book.

Testimony, again, stands in the place, as it were, of a kind of sense or faculty, analogous to memory and

experience. It is an instrument enabling us to apprehend events and objects wholly beyond our own immediate reach; and enlarging thereby our sphere of perception and knowledge infinitely. It is in a manner, the seeing and apprehending with the senses of other people. The effect of which is, that the subjects of its exercise can never be apprehended in the first intent; but are dimmed and more or less distorted, as it were by the effect of distance, and the refracting power of the medium through which they are viewed. Nevertheless, our sphere of knowledge is so widely extended, and our store of facts so greatly increased by it, in subjects of the highest concern and usefulness,—since without it we should live only in and for our own generation, and in and for our own little sphere of action and observation,—that there is scarcely any one of our senses or faculties which it is more useful to learn the proper application of; and there is no one which is more the subject of correction and improvement.

This improvement is altogether the office of judgment. For experience, which is the very means and materials of judgment, confirms or contradicts, flies from or associates with, the suggestions of testimony; and testimony confirms and corrects, in like manner, the memory and experience,—these different instruments thus co-operating with one another, and mutually promoting their respective efficiency.

Testimony, also, is in this same respect of particular use in correcting and confirming, and giving stability to the present information of all the senses. The con-

sent and agreement of the world in general, by which a concurrence in action and expectation is produced in all our conduct, is itself a testimony to the correctness of our own views and impressions; and we are constantly referring to it as a pattern and standard, whereby to keep our minds and opinions, and even the belief of our senses, in a proper balance. That such a balance of mind is requisite, formed by continual correction and habit, is evidenced by the experience, that the living among madmen has a tendency to make a sane person mad, apparently by contagion, — but in reality, in consequence of his own views becoming uncertain and unstable, for want of the general concurrence and confirmation of the senses of those immediately surrounding him. Even the observing and conversing, but for a short time, with a number of insane patients, is often sufficient to make the mind feel unsettled and wavering; much as when on leaving a ship, we feel as if the ground were rolling under us, and have still some difficulty in keeping our balance. The reading for a long time together the books of sceptical writers, will have much the same effect, in making us, though ever so entirely unpersuaded, feel at first and for a time at least, somewhat unsettled in our thoughts and opinions.

Such being the case, that our minds, and even our senses have so much need of, and are so greatly subject to the influence of example and contagion,—woe be to that man who shall endeavour, for the vanity of a wanton and death-dealing victory, to destroy the balance, and dislodge from its sphere the loadstar of the mind, by the power of false and sceptical and meta-

physical reasoning.* A compass we each of us require and seek after, by the very law and necessity of our nature; and he who shall have lost it, even for ever so short a time, is of all men the most helpless and pitiable.

Such a state of mind is frequently exemplified for a time in minds of the greatest capacity and usefulness; for these are compelled to subject themselves to this condition, in a greater or less degree, in their progress towards greatness. Each mind acquires a certain balance and compass in the first instance from education. But the law of mind can never be perfect and independent, while resting solely upon such a foundation; neither is it at all likely that it should be exactly suited to the character and capacity of the particular individual. The mind which is preparing itself for the higher walks of discovery, and independent exertion, must necessarily free itself from these trammels and fetters; and in so doing, it must incur all the risks attendant upon the state and condition of a mind which has lost its standard: namely, while it is framing for itself a proper and independent system for its own particular use and guidance.

Every enlarged and liberal mind goes through this process in a greater or less degree, on its approach to manhood, and to that period of life at which self-education begins to operate effectually, and the character

* For the sense in which I use the vague term metaphysics, see Chapter VIII. of the First Book. It is the applying to a subject a mode of reasoning or analysis which is not suited to it; and is as essentially false and erroneous, as would be the measuring of fluids by the foot-rule, or time by the acre.

and principles to be formed permanently. And often are the dangers of this crisis lamented by those who are ignorant that the greatest and most elevated, as well as the most unstable, purposeless, and perverted characters, are the birth of this travail of the mind and character after a fixed and settled principle. This is a crisis not properly to be lamented, but to be observed and improved with all possible care and diligence to its proper use and purpose. Namely, it is to be guarded against, that, in emancipating itself from the fetters of education, the mind do not, by a confined and particular course of study, subject itself to a new and opposite state of slavery; but that, in seeking after equal and impartial truth, it give to all subjects a fair and equal weight; and above all, that it still be governed in this course, by the strictest love for truth, and a careful guard over and cultivation of the moral character.

WHAT WE CANNOT PERCEIVE.

But a point of still higher and more important consequence than the knowing the means and nature of knowledge, is the ascertaining the limits of it.

Now the limits of perception are evidently prescribed to us by the powers of the senses which we have enumerated. It is not the nature and extent of things themselves and of the universe, which set the bounds to our knowledge; but the limited powers and province of the senses which apprehend them. There are undoubtedly vast multitudes of objects exist-

ing even in this sublunary creation, which it requires only additional senses of a new kind and power, and such as are not given to man as a general endowment, to enable us to perceive and notice.

Not to dwell upon the perception of spiritual existences, or upon the senses with which such beings must themselves be endowed, for the communication of ideas without the aid of corporeal faculties,—there must be numberless objects of the material creation, which we want but the aid of new or improved senses to recognise; and our direct knowledge is as surely contracted within the limits of actual perception, as that of a man blind from his birth, or of Balaam before his eyes were opened to discover his spiritual antagonist. Certain colours are wholly undistinguishable by the eyes of certain persons; and sounds can be produced both so high and so low, as to be undiscerned by the ears of people in general. May there not be very many sounds and objects which no person whatever can perceive? It has been conjectured, not unreasonably, that the voices and notes of insects are in general of a pitch beyond the reach of our sense of hearing; so that there may be innumerable multitudes of ceaseless and meaning sounds, which nevertheless afford no interruption to our senses and occupations. Some beings, some insects perhaps, view the air as distinctly as we do the clouds and water. The same also with respect to the electric and magnetic agents, and the world of spirits. How many objects of a similar, or of an abstruser nature, may there not, nay, must there not be, of which we have barely discerned or conjectured the existence or agency! There is much ground

for the conjecture that horses and dogs have some additional senses or peculiar instincts, by which they are enabled to find their way under extraordinary circumstances; and birds of prey, by which they discover carrion at immense distances, beyond the reach of smell, or of sight. There must also be new properties, and subjects for these senses or instincts, if any such exist.

Further then than what the senses actually perceive, according to their own proper power and faculty, we have no real and direct knowledge or intelligence. Neither have we any knowledge in effect beyond the simple sensation. But in like manner as "mind" is properly defined by Hume to be a "succession of impressions," which constitutes our whole idea of it, so knowledge, which is inseparable from the mind which it furnishes, is itself only a treasure of ideas and sensations laid up together in order and permanence. In like manner memory is nothing but the presence of an idea not suggested at the moment by the outward senses, in association with some other past impressions, or distant objects.*

* In subscribing to Hume's description of "mind," that it is a "succession of impressions," I subscribe to it only to the extent and effect that this constitutes *our whole idea of it*;—and that we must deal with it, if we would deal correctly, according to this aspect. The separate and actual existence of mind, distinct from the ideas which it receives, may be received as a conjecture, or as an article of faith. But of such a separate substance or essence we have no idea; and practically it signifies nothing to us whether the separate mind or soul will revive again, bringing with it its ideas; or whether the ideas and sensations will of themselves exist to eternity, which are in effect, our real existence, and identity, and consciousness.

Every thing else beyond the simple idea and sensation is a knowledge only of effects ;—and these are themselves only a series of sensations, succeeding each other according to certain rule and experience, and agreeably to expectation. Of the connection of these effects with their causes we have no perception ; our knowledge reaching only to the immediate and regular succession of phenomena, according to a certain order. We cannot perceive the connection between thought or will, and motion. The cause of the succession of motion, immediate upon and according to the intention, is quite beyond our knowledge and comprehension. This is the connection between mind and matter. But the same is true of the operations of material substances upon one another. The connection between a magnet and the body said to be disturbed by it, is equally beyond the perception of the senses ;—between impact also, and the body to which motion is communicated. These are both equally instances of a knowledge only of effects, a mere succession of ideas and perceptions.

WHAT WE CANNOT KNOW.

HAVING briefly instanced those things which we cannot *perceive*, it is not difficult for us to determine further what things we cannot *know* or *comprehend*.

Since the connection between motives and action is beyond our apprehension,—since freewill is the power of acting differently under the same motives and circumstances,—and since even in the first, that

is in the most simple case, we can perceive only the succession of ideas and sensations,—when, as in the case of freewill, this succession becomes uncertain and variable, we have not even the topic of rule and order to rest upon; and the matter exceeds our comprehension. For a cause without a certain and invariable effect, is without parallel or precedent.

In like manner we can neither perceive nor comprehend the origin of thoughts and impulses; which entering our minds and presenting themselves to us without rule or order, and without being preceded by any necessary and certain idea or circumstance, to which the term cause may be attributed, we have not even this principle, of order and experience, to lay hold of,—and this also is beyond our comprehension.

In the same way the agency of the Holy Spirit, is without fixed rule or order; and is preceded by no definite and prescribed sensation or circumstance, which may be perceived and acknowledged to be the cause of its operation. Its presence in consequence is doubted, and its operation deemed incredible by many, who have failed to observe and persuade themselves of the very great number of operations and influences which there are in nature, which are at the same time entirely beyond our understanding and experience: that is, our comprehension.

The idea of creation, though we may give a name to it, is entirely beyond our understanding and comprehension. Every idea of production which we have, is that of a change from one state to another;—and even of this change of condition, we have no other apprehension than that of a succession of appearances

and sensations. But, of a change from nothing to existence, or even of any such thing as a state or period in which nothing should exist, of these we have had no knowledge or experience whatever, and consequently cannot have any adequate idea or comprehension.

In short, we cannot in any subject have a definite conception or idea, any real knowledge and understanding of that which has never at any time presented itself to our senses and experience. Our senses, indeed, may be in some measure enlarged, and assisted in their powers and operations; though not to any very considerable extent and purpose. But beyond their actual sphere and province, after having been so improved and assisted to the uttermost, there cannot be any real knowledge or comprehension by any possibility.

At the same time it is most evident, as has been said, that very many things must really exist, which are beyond the utmost reach of our apprehension; and also that there are a multitude of truths and doctrines which we never can explain or understand, though we are bound nevertheless to acknowledge and obey them. It is of the greatest moment then to every one of us, that we should be well instructed what these subjects are, and what is the exact bound and limit in each of them, at which their province commences; since, where the province of apprehension and understanding ceases, that of faith begins,—whose subjects are verified, not by the use of ordinary sense and reasoning, but by an approving consciousness of the consistent working of an intimate scheme of doctrines and

duties, of interests and operations, the parts and links of which are beyond our discovery or comprehension.

It is of use, therefore, by dwelling upon examples and subjects of this nature constantly and familiarly, to make ourselves sensible of their number and frequency, in contradiction to the natural pride and ambition of the human intellect, which presumes itself capable of every height and depth of truth and knowledge, and so leads us astray from the possible subjects of discovery and improvement. Now to repeat a few of the examples which may be given of subjects which are beyond our comprehension, for the sake of this impression and conviction,—we cannot, in the first place, conceive the mode in which ideas lie dormant and treasured up in the memory: ideas, of which, though they exist only in consciousness, we are nevertheless unconscious, until they are awakened and revived by recollection. This is to us, as it were, a creation out of nothing; the reproduction at least and resurrection of an idea, the origin and cause of which has, to our apprehension, been entirely disconnected and separated from it.

We cannot conceive the mode of the reception of an idea at all; since it is an operation entirely without parallel, and *sui generis*. We can only express its effects and consequences by metaphors and analogies. We cannot conceive a thing beginning to exist without a material cause for its existence; because all beginnings, that is, changes of condition within our observation, have been brought about by material causes. We cannot conceive a perfect idea of a beginning at all, since, as was before stated, we have no

idea or experience of any thing being produced out of nothing, or even of a state in which nothing exists.

In consequence, the first verse in *Genesis* is an article of faith, undiscoverable by reason, and incomprehensible. This is a point of knowledge at which philosophy could never arrive, since it contradicts all its topics and evidences. Aristotle, therefore, of necessity, the prince of philosophers, held it for certain, that there has always been a primitive matter; and that man, the world, and the universe, have existed from eternity.

Since we have no experience or understanding of any operation taking place without a sufficient cause, nor of a cause without a fixed and correspondent effect; and since we did not endow ourselves with the passions and motives with which we began the task of self-education; therefore we cannot have a clear idea or understanding of the nature or existence of free-will. It contradicts all philosophy and reasoning, though we feel it, and are conscious of it in its effects; and as Johnson says truly, "All theory," that is, all attempt at philosophical explanation, "is against it; all experience," that is, observation of the results, "is in favour of it."*

Still more contrary to experience and incomprehensible, is the compatibility of free-will with grace, or predestination. This, therefore, must be an article of faith. Yet by study and experience in heavenly things, we can possibly attain to a kind of acute and quickened moral sense, by which we shall be enabled

* Bosw. vol. iii. p. 280, q. v. MONTESQ., 69th *Pers. Lett.*

to feel and verify this compatibility, after it has been revealed to us, though not entirely to reason upon and explain it.

Those things then, it appears, are beyond knowledge and comprehension, of which we have no experience at all, or no similar experience,—that is, which being *sui generis*, we have no other corresponding and similar object of apprehension with which we may compare, or by which we may sufficiently explain and verify them. And oftentimes have subjects of this latter class, such as free-will, for instance, been put upon the same footing, and doubted of, together with those of the former class; such as creation and predestination. As well might we doubt the reality of thought and memory, because we have no other experience or example of a similar kind. These, therefore, are as capable of experience and certainty as any other sensation, though they are incapable of comprehension and explanation, for want of a term of illustration and comparison. The rest are capable neither of comprehension nor experience; and are therefore purely articles of faith.

The want of knowing this distinction and the reason of it, and the endeavour without success to comprehend and explain things which are in their nature inexplicable, has occasioned many to deny their own experience of the one class of truths, and the possibility of both. But the knowledge of this distinction convinces us of the error of endeavouring to comprehend and explain those higher mysteries, such as the nature of God: the divine and human character of our Saviour: the Holy Trinity; which are revealed to us not accord-

ing to their own nature and existence, but according to our capacity, and the use which we ought to make of them, for the guidance of our moral and religious conduct, and personal improvement.*

WHAT WE DO NOT KNOW.

It is easy enough for us, by following the same course of reasoning as the above, to determine what those things are which we do not know. We do not know those things of which, though we might have done so from the capacity of our nature, yet nevertheless we have had no experience. For as far as we ourselves are concerned, it is the same thing as if we had not had senses capable of perceiving them. Of this nature is "falling in love," of which a child, however he might use and explain the word, can have no real notion; for want of actual experience. The same thing is true of other passions and experiences, even to grown people; since there may be many of which they also have never become sensible. Among these may first be instanced, the love of God; of which, with the exception of St. John, and a very few others of

* Highest moral and religious truths and principles, of which we have had no experiment in ourselves, and therefore cannot comprehend, can be enforced on us only by parable and type; till being realised in us, they can be experienced in the first intent. The Lord's Supper is a parable to those who do not effectually receive it. The "living water" was so to the woman of Samaria. It was the same to the disciples, John vii. 38, because the Holy Ghost was not yet given. But it was felt and known at the day of Pentecost.

the most distinguished patterns of Christianity, scarcely any perhaps have attained to a full and perfect experience. The same also may be observed of pure and perfect benevolence, and Christian charity; of which no one, perhaps, besides St. Paul, could have given so lively and accurate a description, for want of the same intimate experience. And even this description can never realise the idea to another person's mind, who has never felt its pure vital warmth, and operative influence.*

It is the same with most of the other passions and motives, bad as well as good ones; of each of which, one person has a better and more perfect experience than another; and in respect to each one of them, those who have never felt it at all can have no more real knowledge, and capability of judging and reasoning well concerning it, than a blind man can have of taste in colours, or a deaf man of harmony and grace in language. And any reasoning or explanation made use of by persons so circumstanced, can be used by them only as parrots and imitators. Yet such persons do often discourse on such subjects freely and familiarly, as blind men have done of the objects of sight; and

* This principle is peculiarly enforced in St. John's gospel, the 3rd chapter, of Our Lord's knowledge and teaching: ver. 12, "How shall ye believe if I tell you of heavenly things? and no man hath ascended up to heaven,—so as to have experienced and to be able to know and teach them,—but he that came down from heaven." And verse 32, "What He has seen and heard that he testifieth." And again, chap. 14, ver. 17, "the spirit of truth whom the world cannot receive, because it seeth him not, neither knoweth him; but ye know him, because he dwelleth with you, and shall be in you."

have deceived the world into a belief of their having as good an understanding of them as men of real experience. Nay, as persons of superficial knowledge and understanding have often the greatest talent and freedom in the use of words, their reasoning, which is entirely that of habit and imitation, gains for them frequently a greater estimation for wisdom, than men of real knowledge can attain to. The consequence is, that the superior claims and advantages of real knowledge have been for the most part lost sight of, or very ill appreciated by the world in general, who, being themselves ignorant, and coming eagerly for instruction, must needs be caught in the first instance by the most showy and flattering invitation, and the best advertisement. It will generally be found also, that men of borrowed notions are a great deal more obstinate in their opinions and belief, than those who originated them; for though a parrot may be taught to repeat with accuracy and originality of effect, what he has heard said, no one has ingenuity sufficient to unteach him his lesson, when he has once learned it.

It is evident that knowledge so used and obtained, can have little or no value in matters of doubt and difficulty; but that the more real and personal our observation and acquaintance shall have been in any matter or subject that admits of doubt, and requires depth and accuracy, the more just and perfect a great deal is likely to be our judgment and comprehension of it. But since our capacities, and lives, and opportunities, are so extremely limited, and insufficient to procure for each of us the requisite experience in any great variety of subjects, hence the necessity which is

imposed upon us, in the endeavour after any superior degree of knowledge and attainment, of confining our attention principally to one pursuit; which measure alone, to minds of ordinary strength and capacity, can afford a reasonable hope of any very perfect knowledge, or decided success.

At the same time it must be remembered, and kept continually in mind, that the deepest study and acquaintance with any subject, does not always ensure the most correct judgment; for otherwise, all persons of equal talent and acuteness, who studied it with equally great labour and attention, must infallibly come to the same conclusions: which we do not find to be the case. Improved knowledge and apprehension requires the co-operation and aid of judgment; to which nothing on the other hand so greatly contributes, as a general view of nature, and an acquaintance with many different subjects. These two objects are in some measure opposed to each other. Nevertheless, they must both be pursued, according to their proper use, and in the proper manner; and they may in a great degree be made compatible and to co-operate with one another. It will be found, that for the most part this object will be best attained, by pursuing a general and cursory acquaintance with many different subjects, and an intimate knowledge of one in particular:—namely, that one which is to become the principal field of exercise and practice.

Of course the degrees of intimacy with so many different topics must be infinitely various; and in each of them we ought to forbear or exercise an opinion, be positive or diffident, according to the actual measure

of this intimacy in the particular case. The opinion which is formed by different persons under similar circumstances, and upon the same measure of acquaintance, will be valuable in proportion to the general goodness of the judgment. But this judgment will for the most part direct us to refrain from any positive sentence in opposition to general belief, or any learned man's opinion, except only in those topics which we have ourselves made the subject of close observation.

In order that neither apprehension nor judgment should engross exclusively our study and consideration, but that each may be duly advanced and cultivated, according to its proper measure and proportion, the instructions which follow are presented for the improvement of each of them.

CHAPTER II.

IMPROVEMENT OF APPREHENSION.

THERE are certain things respecting which we have no doubt ; as, of our own existence : that is, our pains and pleasures, our feelings, our appetites, our desires, and the gratification of them ;—our minds : that is, our thoughts and recollections, our wishes, our hopes, our joys and sorrows ;—our senses. The operations also of these : as, that music produces pleasure ; discords, displeasure ; fear produces pain ; ambition and hope, exertion.

The great object in our search after truth, is to bring other subjects to the same degree of clearness and certainty as these, as nearly as possible. Instead of which, metaphysical philosophers (and most moral philosophers of the European school, having formed their principles after the Grecian model, have been of this description,) have chiefly busied themselves in trying to analyse those things which are certain : as, to discover what thought and sensation are, and the cause of their operation ; how ideas are excited in the mind ; whence come memory, recollection, and consciousness ; which is the correct division, enumeration, and arrangement of them,—instead of the mode in

which they may be applied most usefully, and improved most practically.

It is plain that such inquiry and analysis can be of no real value, except for curiosity and amusement, and for the purpose of arranging the subjects for subsequent recollection or convenient treatment. And as these are matters of comparatively little consequence, any lengthened or intricate discussion for the sake of them, must tend to give them an importance which does not belong to them, and to lead the attention astray from what should always be the principal inquiry, namely, how the faculties of the mind may be best improved and directed, and made conducive to the correction of conduct, the discovery and verification of practical knowledge, and the advancement of truth.

The foregoing analysis of the nature and subjects of knowledge, has been made partly in obedience to the general taste for such topics and inquiries, which savour rather of speculation than of real philosophy; partly also, because it must be really hurtful to have a wrong opinion of the nature of the subjects to which we are about addressing ourselves, and of the likelihood of our making any considerable advance in each of them.

Nevertheless, our proper and peculiar business is with the errors and imperfections which are in the mind: namely, in the operations of apprehension and judgment; the causes of our frequent deviation from truth and accurate knowledge; and the means of removing them. These are most of them equally applicable and operative, whatever be the line or topic of investigation, within the province of really useful

inquiry, and of those things which may properly lay claim to the name of truth. For, with respect to inquiries into the nature or real existence of things, whether mental or corporeal, these are mere questions, as has been before shown, as to what senses they affect; and cannot lead to conclusions productive of any improvement or alteration of conduct. As for mathematics and its abstract ideas, none of which have any real existence even in their most elaborate forms and combinations, these can never be dignified with, or aspire to the character and appellation of truth. And physical philosophy—though claiming for its subject that which is real and tangible and useful, and giving birth and effect to many great improvements, conducive to the external wants and comforts, the appetites, and even the existence of men—does not nevertheless call into operation man's highest and most characteristic faculties; neither does it operate to the improvement of his moral conduct, or advancement in religious knowledge and proficiency: which alone can set up any just claim and pretension to the name of truth.

In religion then, and morals, and the study of human nature, and in all things which direct and influence the business of life, and the course of human action, whether it be the policy of public or domestic government, or the propriety and wisdom of individual conduct, or the particular act of each person in each particular case,—the question is never concerning existence or identity, or the nature and form and constitution of things, but respecting effects and consequences, the laws and operations of things, as of

the mind and motives, and the principles of action, whether divine or human, general or individual. It is in the misapprehension of these, that all errors in morals and wisdom consist; and the removal of them, by the improvement of apprehension and judgment, is the proper province of logic. And this is truth.

The whole object and desideratum is to see things clearly, and in their true light.

Clearness and correctness of perception is principally to be attained by First apprehension; the improvement of which is our present object. Over things which we are acquainted with only through second apprehension, judgment must exercise the principal or entire control, for the purpose of setting them in their true light before us; and that will form the subject of the second and third divisions of this Second Book.

Apprehension and judgment, however, are not separated in practice. Even in first apprehension, almost every use of it is accompanied with some exercise of the judgment; and the foundation of judgment, as has been before said, is entirely laid in the experiences and materials afforded by the apprehension. In effect, however, and in the mode of operation, they are widely distinguishable; and they are rarely found to exist in any great perfection in the same individual: the large and comprehensive view which is necessary to judgment, acting frequently, it should seem, to the prevention of acute perception in particular subjects; and the accurate observation of particular facts and objects, to the exclusion of a great multiplicity or distant range of objects from effectual notice.

For those who acknowledge and are sensible of a

deficiency in both or either of these particulars, something perhaps which will be useful may be found in the following observations ; and some hints and directions which may assist them to the improvement and better use of those faculties.

AIDS AND INSTRUMENTS ASSISTING THE APPREHENSION.

For the external senses a multitude of aids and instruments have been invented, applicable for the purpose of instruction, assistance, and improvement. Among these are microscopes, telescopes, all meters, —including scales and measures, watches, clocks, thermometers, and barometers, —looking-glasses, prisms, &c. All these assist the senses, and extend the field and range of objects which are brought within their cognisance, either by improving the power and perception of the faculty, or by placing the object in a fitter position for observation and examination.

There are, besides, deceptions practised upon the senses, and imperfections in the use and exercise of them, which are corrected and removed by experience. As that by which objects in apposition with each other, appear to be nearer together than they are in reality : on which account, the dome of St. Paul's, when seen just over the tops of the surrounding buildings, seems to be much nearer, and lower therefore, than it really is. The same cause it is, namely, its apposition with the clouds, or the apparent vault of the heavens, which occasions the moon to appear of a different size

in different positions.—For the apparent shape of the sky is a flattened arch, the parts of which nearer to the horizon appear consequently more distant than those nearer the zenith.

White lines and objects appear broader and larger than dark-coloured objects of the same dimensions ; an experience which is of great use and consequence in determining the proper size and distance of the columns in architecture.

Lofty objects appear more lofty when seen from above, than from below.

Figures smaller than life, but of the natural proportions, appear too slender. Colossal statues, of the same proportions, will always appear too stout.

In Phidias's model for a colossal statue, the head was too large ; and the model was rejected. In the statue which was executed according to the model which was approved, the head was found to be disproportionately small.

These last are not properly aids to the apprehension, and instruments for its extension and improvement ; but they are examples of the laws of nature, drawn from experience, in regard to the operations of the external senses. They are more properly, therefore, instruments of the judgment, as indeed are all experiences, in respect to and applicable to external nature and material objects.

We join them here, however, for the sake of dismissing them. For these, as well as the others first mentioned, being applicable only to physical subjects, which are not the topic which we have proposed for our discussion, we entirely pass them over at this time.

Not that they are otherwise than of the highest use and importance in the subjects to which they properly belong ; but because we are desirous to proceed at once to those subjects which are within our proper department, namely, moral philosophy, and the exercise of the internal senses and motives.

Also those other instruments, which are conducive to the assistance both of the external and internal faculties ; whose application, however, is chiefly in the subjects of physical philosophy and the objects of external nature—such are arithmetic, geometry, algebra—we shall not uphold or recommend them as applicable to our purpose, further than as an exercise tending to strengthen the mind, and to bring its powers into a habit of order and obedience.

Memoria technica, is another artificial and mechanical instrument, which falls nearly within the same class. This, however, we shall touch upon rather more fully, in the course of our remarks upon the improvement of memory.

AIDS TO THE INTERNAL SENSES.

IN discoursing of the mind, we are in the habit of deriving our language and descriptions, chiefly from metaphors and analogies drawn from the external senses. Thus we talk of ideas and images, as if it were of sight : of impressions and feelings, as if of the sense of touch : of harmony, unison, discord, as if of sounds and hearing.

This is not without good foundation and reason,

since the mind is affected in many respects in a manner extremely analogous to the external senses ; and independently of these being the channels of information to the mind, and their proper use and improvement being on that account of great importance to it, the means of improving them point out by analogy the best methods of exercising and improving the faculties of the mind likewise.

Now impressions and images dwell upon the sight for a short time, after the removal of the object which awakened them. Thus a spark whirled round, or carried forward with rapidity, appears to be a circle or a line of light ; and the spokes of a wheel which is in rapid motion appear to be multiplied, and almost in contact. It is also necessary that the presence of an object to the eye should not be absolutely momentary, for then it will not produce any impression at all ; as a bullet from a gun ; a piece of money thrown from one hand to the other by a conjuror.

The operations in the mind are altogether analogous. Our thoughts dwell there when once they have been awakened ; and sometimes they haunt us, if strongly impressed, in spite of our wishes and endeavours to get rid of them : in the same way as Newton is related to have seen the sun for two or three days together, even with his eyes closed, after having gazed for too long a time, and too intently, at that luminary. It is probably by means of this dwelling of images upon the sight, and thoughts upon the mind, that the mind is enabled to compare one idea with another, and to connect them together : without which there could be no useful knowledge or acquirement ; — and the eye

to comprehend the whole of a landscape: since the principal attention seems capable of being directed only to one very limited spot at a time.

In respect of time also being requisite, and some duration of the idea on the apprehension, to create an impression upon the mind at all, the analogy between the operations of sight and apprehension is likewise complete. In spite of the proverbial opinion and expression, "as quick as thought,"—by which no time at all is generally intended; in spite of the different facility and quickness of different minds; and although ideas awakened and drawn from the memory are infinitely more rapid than first impressions, yet even the alphabet cannot be rehearsed in the mind, nor figures counted in the memory, without time to do it in. Much more does a recital or description conveying a new set of ideas and images require time to produce an effect and impression; and the more so still, in proportion as they are more unusual and complicated. Multiplicity also, and variety, and quick succession, tend most materially to prevent this effect, both in the external sight, and in the mental apprehension.

Whenever the first impression or thought is once effaced, and has vanished from the mind, it is thenceforth stored up in the memory; and can only be revived by recollection and association. Here all analogy between the powers of the mind and the operation of the external senses, entirely ceases. The memory may possibly recall and impress again the image upon the sense; but the sense itself has no power of recalling or retaining the impression.

The rule of practice to be derived from the fore-

going reflections, with the view of rendering the impressions of objects strong and vivid, is simple and obvious.

The mind should as much as possible acquire the power, and be brought into the habit of observing one or a very few things only at a time; and of dwelling for a moment at least upon each subject of attention individually and abstractedly. It should avoid if possible, the having a great multiplicity of objects, or parts of the same object, presented to it at once; and when this is unavoidable, it should be in the habit of resolutely abstracting itself, and fixing its chief attention, upon the most important and leading features.

The mind should not indulge itself in rapid and repeated transitions to objects of a dissimilar character, before the objects which are at present under review have been sufficiently observed and imprinted. Each transition should, if possible, be deliberate and gradual; and be made, as much as can be, to subjects of the same kind, and which are connected each of them, in some degree at least, with those which have immediately preceded them. Thus the necessity of dwelling for any great length of time upon each individual topic is partly taken away, since each new object is, as it were, but a continuation of the one to which the mind is already attentive; and the succession of ideas is also in that case useful, in facilitating recollection by means of the association, instead of each idea becoming an obstruction to the rest, by extinguishing and effacing them.

It is thus — by general order and arrangement of

objects and occupation, joined with a habit of concentration and individuality of observation—that strongly-impressed and vivid ideas, without too great expense of time and labour of attention, and multiplicity of ideas, without indistinctness and confusion, can be most adequately acquired.

Nothing can be more contradictory to this rule, or be more injurious to the minds of those who are searchers after accurate and substantial knowledge, than the practice which is prevalent of reading all the ephemeral publications and periodical productions of the day, and then dismissing them in continual succession from the attention and memory. These are for the most part filled with a variety of dissimilar and opposite topics, often lightly and superficially treated, intended only to be read for the purposes of present conversation and amusement; which serve also little other end or purpose, than that of chasing away from the memory each preceding topic, and of relieving the mind from every possible burden of thought and reflection.

It has already been shown, that for the purposes of real knowledge, ideas and meanings must be gained, not by definition and description, but by familiarity and actual experience. That no other means can effectually acquaint us with the use of words, the meanings of terms, the force of expressions, thoughts and reasonings. That unless the ideas spoken of, or at least the

members and parts of which they are composed, have previously passed through the mind in actual review, and as it were personal presence, the language and sounds conveying them will produce no perfect ideas in the mind receiving them, and nothing can arise from such communications but ambiguity and confusion.

Hence it is requisite for every one who would use or pursue any ideas or topics to the most useful purpose, that he should actually acquaint himself with them; that they should become original in him; that he should make them his own;—especially those which are in any way connected with moral subjects. For this purpose we must obtain, wherever it is possible, an ocular inspection, a personal view, a familiar acquaintance. This, in the subjects of moral philosophy, is not otherwise to be accomplished, than by actual experience of all the feelings and passions and sentiments which are the topics and materials of it, and of all the motions and actions and energies which those feelings operate. These, again, can be fully and properly experienced only by the *practice* of each of them.*

In other cases, where this cannot be accomplished, a much longer study, and more devoted attention and examination, is requisite, to produce the proper and sufficient impression in all subjects. For this reason—since each author has something peculiar in his own

* Hence the knowledge and understanding of virtue and religion is a practical subject: to be perfected by use;—and hence the Scriptural expression and precept,—to “do” the truth.

mode of thinking and reasoning, something native and original, in the ideas which he labours to communicate—it is necessary, for the purpose of fully arriving at his meaning, to read an author in his own words ; and to read him through ; or at least so much of his work as shall enable us completely to familiarise ourselves with him, and make us acquainted with the habit of his mind.

It is not to be supposed that this is the case to the same extent in the physical sciences : the ideas and subjects of which are simple and definite ; and are either such as may easily be acquired by actual experience ; or if, as is the case in mathematics, they are unreal and abstract, are so simple and unvarying, that when once they have been examined and comprehended, they are always the same, exactly and identically, in whose language or writings soever they may afterwards be met with. These sciences, in consequence, and all fresh discoveries and additions which are made in them, may easily be handed down from one person to another, and from generation to generation, without any misunderstanding, loss, or deterioration ; and they are in fact generally most advanced and perfected by those who were not the original inventors of them. But in moral sciences the case is far otherwise. In these, for the most part, all discoveries and systems and theories have ever been built up, developed, and perfected to the highest pitch to which they have attained, by the hand of the original authors and inventors of them.

Now this personal knowledge and actual acquaintance is necessary for understanding the meanings of

terms and phrases, even in the common outward arts and accomplishments of life. No one can fully and perfectly appreciate, till he has learned by constant practice, what in elocution is intended by the terms rhythm and accent; in painting, by the term keeping; in riding, by the appui, the going with your horse. How much more highly necessary then must this be in the passions and impulses, in order to have a just and true perception of the operations—of Christian love, for instance; of faith and benevolence,—so as to be able properly to understand and reason upon them? How requisite must it be to read the Bible,—which is the vehicle expressly intended to convey the law and pattern of a mind infinitely beyond our knowledge and comprehension,—in the very phrase and language of its own authors, and to beware of the alloy and adulterating influences of human comments?

ACUTENESS OF PERCEPTION.

Acuteness of Perception, both acquired and natural, differs very greatly in different persons, in degree and in extent. In some it is a general quickness of apprehension in all manner of subjects; in others, in subjects only of one kind. Some, again, are greatly deficient in it altogether.

That which is by nature is probably the most general; that which is by improvement is more confined and limited. The sportsman, for instance, has a quick eye for his game; the fisherman, for a fish; a sailor, for the indications of unsettled weather, and of

a change of wind. Some men have a quick and perfect insight into character, and a penetrating apprehension of human motives.

Now the habit of reflecting, of judging, and deliberating, but rarely co-exists with, and is apt to operate to the exclusion of acute and rapid perception, and to blunt the external senses. Studies also which require much thought and arrangement, are apt to weaken the habit of observing facts and realities, and the common affairs of life.

In like manner, the habit of studying and making observations with a particular view, and in any one particular line, deadens the perception to subjects which are of an opposite character. Thus the present taste of the world for theories, and speculative philosophy, has blunted its perception to such phenomena and truths as do not readily fall into system and arrangement. Not the best means, therefore, of overcoming selfishness, but the question whether all motives are selfish, is generally attended to;—not the best method of improving and directing the faculties, but the enumeration and definition of them. The influences of the moon upon the weather and upon lunatics are unobserved and discredited, because they defy the power, and are beyond the province, of explanation and system. The same cause has led some political philosophers to account for population wholly by the means of subsistence; observing only those facts which support their system, and failing to notice all those phenomena which resist calculation and contradict their theory. For the like reason, also, have proofs of religion and of the agency of God's provi-

dence, been drawn from the material and external world almost exclusively, through the devotedness of men to physical philosophy ; while by far the strongest and most conclusive evidences—namely, those which may be taken from the human heart and mind, and their operations—are left unobserved and uninculcated.

Another remark which it is necessary to make is that exclusive attention to any one subject, however much it may improve the perception in that particular branch or line in point of acuteness, does not necessarily tend to produce a correct judgment or apprehension ; so that acuteness of perception may sometimes be separate from truth of perception, even in the same subject. Much more does it frequently tend to warp the mind in its apprehension of other subjects of an opposite character, when mistakenly applied to them. Many men, for instance, the most misguided in their moral and political opinions, have had, notwithstanding, a penetrating insight into human nature ; and the deepest divines, even, have sometimes turned their acute study and examination of the Bible, to the production of gross error and mysticism.

Thus the perfecting of one attainment, leads frequently to the exclusion or injury of another ; and this from the very essential law and constitution of our imperfect nature. And all these effects and apprehended consequences must be constantly kept in view, in every instruction and improvement which is administered to the mental faculties, and as much as possible guarded against and obviated. It is only in very rare and peculiar instances that a variety of powers can be made to subsist together in perfection,

in one and the same mind; or that the faculties of the mind can be rendered capable of successful application to a variety of subjects. Such are the powers and qualities possessed by the great ones of the earth; who are thereby qualified to fulfil, as it were, a higher and nobler destiny, and to revolve in a wider and more elevated sphere than the rest of men.

It is evident then, that the perceptions are most readily to be sharpened by exclusive devotion to a single subject, and by use and exercise in one particular line. And the measure and extent to which the mental powers may be improved by such exclusive habit and division of labour, is sufficiently apparent, if they bear any analogy in this respect to the outward and bodily faculties.

But such a narrow and exclusive attention, we have already observed, has a tendency to incapacitate the mind for other subjects; and renders it liable to be warped and prejudiced even in its own peculiar one. The habitually rapid exercise of perception also is opposed to reflection; and theory, or in other words, a partiality and preference for new and ingenious systems, which always aids and sharpens the perceptions towards some one certain class of objects, succeeds also in blinding them to certain other classes nearly as effectually. Nevertheless it is most useful, and even necessary, that certain persons should devote themselves with exclusive zeal to particular subjects, for the sake of the superior skill and acuteness which they thereby acquire in them; by which they are enabled to penetrate more deeply into them than others have done. The means of fulfilling this neces-

sity, consistently with an avoidance of the attendant evils as much as possible, is the present object of our inquiry.

* The mind is like the body in the variety of its members, and the operations of which it is capable. These should each of them be brought out by use and exercise to their best powers and capabilities; and this constitutes the chief and proper business and process of education.

But if the powers of the body were to be at once drilled and directed to the performance of those operations which it is the ultimate desire to perfect, it could not fail but that a stiffness, and constraint, and awkwardness of habit would be induced in the manner and motions, which would directly contradict the purposes of good education. Thus, if walking were sedulously taught as a lesson, if conversation were subjected to rules and discipline, these most ordinary habits and practices of life would be performed for ever ungracefully. But the cognate accomplishments of dancing and fencing, of composition and oratory, having been acquired, a power without effort, a propriety without study, is arrived at, which is the perfection of attainment.

In the same manner, the early application of the mind to a few subjects exclusively, however it might

* The method here recommended is indicated in the course of a letter of Bacon's to Sir H. Saville, "On the improvement of the intellectual powers," vol. v. of his works; from which the idea of the following observations is partly taken. The same letter contains many other useful hints, and may be consulted with advantage.

sharpen and perfect the perception of them, could not fail to create a narrowness of mind, and prejudice, and delusion; while depth of study, increasing as it does penetration and acuteness in its own proper subject, frequently tends to promote correctness and truth of perception in all other subjects which are akin to it, rather than its own. The deepest divines, as we have before said, are sometimes the most unorthodox; the deepest politicians, the most mistaken in their measures; the deepest read lawyer, who is only a lawyer, is occasionally the most wrong in his interpretations; the deepest, if at the same time unpractical philosopher of human nature, the most Utopian in his schemes and systems.

To perfect the mind, therefore, in acuteness of perception, without producing in it narrowness and prejudice, the best method is, to exercise it in a variety of subjects, without giving too great a preference to any one. To exercise it, for instance, in ethics, physics, and mathematics, and in several different branches in each of these sciences. To train the mind thus generally to acuteness in everything, before confining it to one particular line and topic: that one which is to be its business and profession for life. The faculty and habit of perception should thus be left to form itself independently, and to grow symmetrically towards its maturity. One may then with comparative safety devote himself to a particular line and occupation, and accumulate the knowledge and facility, acquired by exercise in a great variety of branches, upon one single topic, with the best possible hope of ad-

vancing in the right direction, and of making safe progress in it.

The errors and imperfections which still remain, and which must attend upon all perceptions; the inattention and weakness which blunt them, and the prejudices which lead them astray, must be aided and corrected by judgment.

ATTENTION.

But whatever be the degree of acuteness and the capability of accuracy of the perceptions and apprehension, attention and observation are essential requisites for the useful employment of them. If the perceptions be never so acute and lively, without the aid of these additional energies, their power must be comparatively unavailing; and if they be otherwise, attention and observation will go a great way towards supplying the deficiency. And in regard to strengthening and storing the memory, by which alone knowledge is brought into use, and rendered really availing, they are greatly superior in power and effect beyond the quickest and liveliest perceptions.

Attention, more than the other operations of the mind, is a voluntary act; dependent, on each occasion, for its success, upon our own activity and exertions. It is nevertheless improvable, like all the rest of the faculties, by use and exercise, and is capable of becoming a generally applicable and useful instrument only by habit and practice. This, therefore, is the first

and principal instruction to be given, in regard to this as well as to all the other faculties.

Attention is also very greatly promoted by novelty and variety. Familiarity and habitual acquaintance and intimacy, lull the attention beyond all other specifics. We scarcely regard or notice those things which are ordinary and habitual; yet frequently the most important subjects of truth and knowledge, are exhibited and exemplified by them. It is in general by the rarer and more extraordinary phenomena, that we have been led to the understanding of the most familiar appearances. Comets, and meteors, and eclipses, have attracted greater attention, and have contributed more to the advancement of astronomy, than all the ordinary appearances of the heavens together. The less familiar processes of nature's laboratory have led to the analysis of air and water. Even the air was hardly known to have a substantial existence till some rarer phenomena called for explanation.

For the same reason, travelling abroad is one of the best means of drawing attention to the manners of our own country. The study of foreign languages teaches us to examine and understand the grammar of our own. Fresh miracles have been found necessary to draw men's attention to the providence of God; yet all the daily course of nature, all the order of the universe, all our whole life and existence, are one continued act and intervention of Providence as much as any miracle.

This sedative power of familiarity and habit in lulling the attention, operates in every department of truth and conduct. Whatever is the fashion, what-

ever is customary, satisfies the mind and conscience; and is right! The effect of which is, that every nation, every society, every family, almost, has a peculiar code of conscience and manners, which they respect as right, and practise; each of which has some imperfections and errors, which they themselves however can in nowise perceive: nay, though they would abhor themselves for the equally small deviations from propriety, which they are daily objecting to in other people's conduct. This principle branches out and operates to a very considerable extent. Men, scrupulous in other things, will exchange hats and umbrellas, and overreach in horsedealing. The habitual sabbath-breaker and fornicator cannot at all see that they are transgressing God's commandments. The woman of fashion will teach her children daily to renounce the world,—even as she does!

Through the same principle, partly, a prophet has little honour in his own country;—we have but a slight knowledge of our own characters;—and, we see our own face in a glass, and believing ourselves to be fully acquainted with it, we go away, and forget what manner of face it was.

Attention, on the other hand, is awakened by novelty, and by whatever enlivens the mind, and rouses the passions, or interests the curiosity. Fear, therefore, and love, and jealousy, suspicion and avarice, are each of them calculated in their several subjects, and on their respective occasions and topics, to excite the attention to an extraordinary pitch.

These motives, however, to effort and activity must always be more or less partial in their operation, and

momentary in their effects. They are each of them useful and necessary in their turn, as instruments to rouse and exercise the attention on particular topics, and to give to it vigour and versatility. But the ultimate object and condition to be arrived at must be a habit: a habit and general capability of fixed and steady attention to the particular matter or subject, whatever it may be, which is presented to us for examination. This is the faculty and attainment which must be sought after and aimed at, in all the particular exercises of the attention; and which alone is capable of becoming a fit and useful logical instrument.

For the exercise of close and exclusive attention in particular subjects, leads to mischief in a logical point of view, and is nearly allied to prejudice. Too close an attention to any one topic, whether occasioned by desire, by indulgence, or avarice, is apt to grow into a habit of too minute perception, a morbid sensibility, a useless refinement; which totally unfits the mind for proper judgment in the particular subject of investigation, and still more so in the general business and conduct of life. The close and constant study of medical books, working upon an ill-stored and ill-regulated mind, will occasion every symptom of every mortal malady, to be present to the morbid perceptions of the reader. The over study and indulgence of all that is elegant and polite, will cause almost every word and motion that is out of the strict rule or unaccustomed, to seem vulgar and sickening. Some persons have indulged such an attention to their comfort in dress, that there is always some part of the very

best fitted clothes which makes them restless and uneasy. It is plain to every one that such persons must be unfitted to live usefully in the world, and be rendered miserable and incapable by such a refinement. The eye of a madman is always apprehensively alive and attentive, and his mind is morbidly active and penetrating; but such intent attention is only an assured symptom of his malady, and of disturbed reason.

The proper aim is, to carry the attention to such a pitch only, and in such a direction, as is suited to the subject:—in reading, to get as deep as our author:—in speaking, as deep as the minds of our hearers:—in general principles of moral conduct, so deep as that they shall be easily and immediately verifiable by examples, and applicable to practice. The philosopher must not expect the metaphors of the poet to run on all fours, like his own reasonings; nor the mathematician require the moral philosopher to demonstrate with geometrical accuracy.

As the attention is roused to too great sensibility by apprehension and uneasiness, so on the other hand, it is lulled below the ordinary pitch by satisfaction and complacency. And this is often in proportion to the preceding excitement. The natural indolence of the mind lays claim to this indulgence. The man who in choosing a servant or a horse, in planning the proportions of a building, the exact shade of colour or shape of a decoration, has become sensitively alive to faults and blemishes, from closely attending to them, after he has once suited himself, will repose in his choice, and not notice ill habits and errors afterwards,

which only a short time before would have seemed quite unbearable. In making choice of a tradesman we show the same precaution and sensibility. But having once adopted him, and been served to our satisfaction, we gladly suffer ourselves to be lulled into confidence and inattention, and allow him to depreciate the quality, the quantity, the fashion of his goods, below the rate at which an indifferent person would think of accepting them. And this probably in proportion to the trouble and attention originally bestowed by us in forming our choice. Tradesmen, having had practical experience of the operation of this principle, are in the habit of depreciating the quality of their articles to established customers.

OBSERVATION.

BUT though attention is lulled and relaxed by familiarity with any particular object, observation on the other hand, is quickened and assisted by acquaintance with the subject. Knowledge is the very foundation and cause of observation; and during the whole of our lives we are but learning to learn.

The musician is a more capable observer of music, and can retain a better recollection of it than an ordinary listener; the painter, in like manner, of a face or a landscape—on account of their being familiar with such subjects, and knowing what to attend to, and having in their minds many other subjects of comparison. A good judge of a horse sees his points in a moment; a physiognomist, the features and character

of the countenance; a physician, of the pulse. For they know what to look for; and their observation is directed at once to that which is likely to be found, and which if found will be material. The advocate watches for, and sees in a moment, the weak points of the evidence; the moral philosopher the motives of action, and the nice shades of character. An intimate knowledge of life and of the human mind makes every event, and action, and circumstance, important and interesting.

The difference between the familiarity at present under notice, and the former, which it was perceived discouraged attention, is sufficiently obvious. In the present view, it is a familiarity and acquaintance with the *subject*, or class of objects, and with the character of the art or science, formed and perfected by the study of its parts and members, and the understanding of its principles. In the former case, it was the mere familiarity of contact with the particular *object*, without study or notice having ever been drawn to it by curiosity or interest.

The instruction to be drawn from this inquiry, with a view to the improvement of the observation, is that we should examine always the parts and features of those subjects, upon which we desire to employ our observation usefully and readily; and endeavour, as much as possible, to understand and master their characters and principles.* The more numerous the subjects upon which we shall have bestowed this study

* Ruskin, with a view to the acquiring of a power of observing and appreciating, recommends the copying of some one or more works of nature in all their minutest details.

and examination, the more ready of course and general will be our power of observation.. Thus everything that we gain, will become the means of further acquirement, and according to that knowledge which we have, more will be added; and our advance will be more rapid, and be rendered easier, with every step of our progress.

But observation, as much as all the other faculties, is subject to error; and is liable to be rendered narrow and imperfect by bias and prejudice. Independent of the disposition to idleness and indifference, which incapacitates us generally for all subjects, and which can be overcome only by resolution and habitual effort; the laboured investigation of one subject, and exclusive devotion to one particular science, narrows the observation also, as well as the other operations of the mind before mentioned, and renders it less skilful in the apprehension of other subjects, especially such as are of an opposite character. Metaphysicians are apt to be bad observers of facts and realities, and external objects. Practical men are apt to be little capable of self-reflection, and of observing the causes of things, and the operations of the mind. The poet is ill able to follow the refinements, or to observe the point in a legal argument; and at the same time, the student of legal subtleties is seldom able to appreciate the broad views and useful bearings of political wisdom and legislative policy.

Generally speaking, one turn of mind and habitual course of observation, operates to the neglect and exclusion of some other. To acquire, therefore, a pro-

perly cultivated and enlarged power of observation, and to improve generally the logical habit and disposition of the apprehension, not only should the subjects of principal use and interest be studied and examined deeply; but the preparatory education should be made to embrace as many different subjects in succession as possible, and these should with this view be, in a great measure, dissimilar in their method and character:—as for example, grammar, poetry, geometry, logic, algebra, music, natural history, physiology, physical sciences, moral philosophy. The infirmity of human nature, and the narrow limit of our capacity in general, would require that only those sciences and subjects most nearly allied to, and most directly applicable to the leading object and profession in life, should be pursued much further than will be sufficient to enable the mind to apprehend readily ideas presented to it, according to their several forms and characters, and peculiar aspects.

Nothing, perhaps, so well illustrates, at the same time the use and the abuse of knowledge in governing observation, as the effect of theories. Theory is *supposed* knowledge. And like real knowledge, it induces active and zealous observation of every thing related to its own subject; and at the same time furnishes a peg upon which to hang all the facts and phenomena which present themselves, in aid of the memory. If the theory be a true one, it affords a means and instrument to just observation. If it be false on the other hand, it not only renders the observation imperfect in all other subjects which are opposite to

itself, but confines it to one particular part and aspect even of its own subject; confirming and strengthening its own error by continual additions.

As attention then is subject to the faults and error of extreme sensibility, so observation is liable to that of excessive prejudice. It is of use, therefore, in order to correct observation, and to render it generally active and impartial, not only that we should acquaint ourselves by study and examination with a variety of subjects, but that we should take especial pains to examine every part and side of each of them justly and equally.

It may here also be noticed, that of things which are apart, we chiefly observe the resemblances; of things which are near together, the differences.

This however is a subject of experience and caution, rather than of habit and improvement. It falls therefore within the province of the second part of this book,—the subject of which is judgment; being the experiences by which we correct the errors, and supply as far as possible, the imperfections of apprehension which still remain, after all our efforts for its extension and improvement.

MEMORY.

SINCE Memory is the storehouse in which are treasured up the knowledge reaped by the apprehension, and all the experiences which furnish the instruments of judgment and reasoning, it also is an essential

branch of apprehension, and requires to be treated of in connexion with it.

Of the nature of memory we can form no idea; nor can we at all conceive the mode of its operation. It is beyond all parallel and analogy, either in the external senses or the operations of nature. A narrow storehouse, admitting of continual accessions to its contents without requiring enlargement: whose capacity is rather increased than diminished by every addition to its treasures; an accumulating, vast and various library of thoughts and knowledge, in which every volume in every shelf in every department and subject, and every page in every volume, is equally present to the hand and ready to be turned to, without index or catalogue, or order of time, or place, or arrangement.

We know that memory acts almost entirely by association; whether it be of rote, through the succession of sounds: or of sight, through the order and position of objects: or of wit, or of system, through the similarity of form, or of reason, or circumstance. Also that the more lively the original idea, the longer in general and the more easily it will be recollected.

We know also that memory is various in its powers and qualities. Some have a susceptible memory, some a retentive, and some a ready memory. These do not all of them meet together in general, nor in any but extraordinary individuals. A memory which is susceptible, and quick in the gathering of ideas, is generally combined with a memory more or less ready in recalling them. A retentive memory is most fre-

quently unattended either by a peculiar susceptibility or a very convenient readiness. Retentiveness is a quality suited to the philosopher, and to a person of retired studies; the two others fit us best for the purposes of society, and the intercourse of life, whether of business or amusement.

Memory also is various in the modes of its operation, and in the instruments by which it operates; or rather, according to the subjects upon which it exercises itself. It operates by the ear; as in recollecting music, and in learning by rote. It operates by sight; as in the objects of external nature, when they remind us of anything which was on a former occasion connected with them. It operates by system; as when ideas have been brought into voluntary connection and apposition in the mind, according to real or supposed similarity of reason or circumstance. The memory may also act through the instrumentality of all the other senses;* but these for the most part are employed in subjects of so inferior a character and consequence, as not to deserve particular notice.

These several modes of memory are peculiarly suited to three several stages of the mental progress; and are principally active and influential at different

* Which is thus testified and vividly expressed by Lord Byron :—

“ And slight withal may be the things which bring
Back on the heart the thoughts that it would fling
Aside for ever : it may be a sound,
A tone of music, summer eve, the spring,
A flower, the wind, the ocean, — that may wound ;
Touching the electric chain with which we are darkly bound.”

periods of life accordingly. The memory by rote is most active in childhood; and is capable of very important and excellent use, even before the mind has expanded to a proper apprehension of the ideas which are thus laid up, as it were in store and preparation. The power of learning by rote generally diminishes as we grow older; and as it is principally suited to a period when the mind is incapable of using nobler instruments, so it gradually fails and grows weaker as the memory proceeds to exercise itself in improved methods, and upon higher subjects. Nevertheless, the power of learning by rote may be kept up, and improved by exercise, to the end of life; as is exemplified in actors, who retain this species of memory in great perfection. But it is not in general worth cultivating to so great an extent, except by persons who in this way use it professionally.

The memory of sight is the most general in its use of any, and maintains the chief place during the longest period of life, in almost every person. It comes into operation, like the memory of rote, at the very earliest dawn of intelligence; and though its exercise is most lively in the first stages of life, it is nevertheless used by many as the principal instrument during the whole course of it.

The last mode of memory, and that which is suited to the highest subjects, is that which associates and recalls things by reason and reflection, by relation and resemblance of cause and effect, of operation and consequence.

These different modes distinguish and mark the several stages of the progress of the mind, rather than

the periods of life in which they are operative. For though he live to be ever so old, a man may never give a principal place and use to this last species of memory; and in some persons, on the other hand, it will exercise the prerogative at a very early period. In some degree it must be exercised by all who engage in the business and duties of life; for it is the distinctive and peculiar mark of a rational and moral creature. But it is not right that the highest efforts of the mind should be devotedly pursued by everybody, nor that this abstract kind of memory should obtain at all an exclusive pre-eminence except in those persons who wholly devote themselves to philosophical speculation and discovery.

It is evident also, from what has been stated, that these various forms of memory are not likely to be frequently found together in perfection, in the same individual.

Memory is also various in its characters. There is a conversational memory, which readily brings to mind recent events and occurrences, apt illustrations and coincidences; and quickly raises up fresh topics, suited to the occasion and persons present, at the merest suggestion, and through the slightest connection possible.

There is a narrative memory, particularly useful and suited to the advocate; which delivers a relation vividly and pictorially, with every detail of time and circumstances, of persons, names, and places.

There is a witty memory; which conjures up ideas instantaneously by the most fantastic, odd, and startling associations, and unanticipated resemblances.

'There is the essayist's memory; which borrows and combines a portion both from the wit and the philosopher.

And there is the philosopher's memory; which classifies and associates ideas together, according to the correct analogies of nature, and the just and proper relations of reality and truth.

Neither are these varieties frequently found together in any great perfection in the same individual.

It has been considered by some of the most diligent observers of the human mind, and among the rest by Bacon,* that the mental powers are more capable of improvement by exercise than the powers of the body. It may be doubted whether more can be said with truth than that they are equally capable; when full weight has been given to the differences which are originally established by nature, and which are apparently much greater in the mental than in the bodily capacities. But be this as it may, this is certain, that of the powers of the mind no one is more capable of being improved by exercise than the memory. And some useful advice and instructions may be given as to the best mode of pursuing this exercise.

As the first object of all is to produce an exact and lively picture of the ideas to be recollected, observation and attention are the chief instruments applicable for

* Letter to Sir Henry Saville.

this purpose ; and the instructions which have been given with respect to these faculties, are therefore of principal use with a view to the improvement of memory. Knowledge also, the use of which in encouraging observation was at the same time pointed out, is more especially serviceable in assisting the memory ; since it not only promotes observation in the manner there indicated, but an acquaintance with every fresh study and pursuit, and especially with a variety of studies and sciences, multiplies relations, and the associations therefore which arise out of them. It likewise improves discrimination, and the choice of the aptest and most useful associations ;—and this discrimination naturally grows and ripens into system and classification, which is another most important and effective instrument of memory.

As vividness of impression is the great desideratum, it is necessary to gain ideas as much as possible by first apprehension, and not by description merely. The vividness, not less than the correctness of the picture, depends upon seeing the true natural colours, as well as all the real features ; and an actual observation therefore is as much as possible to be obtained of objects of sight, and of all the other senses.

The best mode of exercising the memory is by depending upon it ; by allowing no memorandum, or other instrument for assisting the recollection to exist, in things which are important. Not so in things which are indifferent, and whose loss will never be injurious ; the neglecting to note which is likely to produce only a habit of inattention. But this exercise ought to be pursued in things which are known at the time of

observing them to be important, and which must again be brought into use and recollection.

It is a highly useful exercise to recount, after short intervals, as at the end of an hour or the day, all that we have seen and read, or found worth attending to; and still more to write it down at such time in our own words and language. By this the memory is tried and exerted; the impression is again repeated; and it is made this second time in the form and order best suited to the fashion of our own minds, and the most ready, therefore, for future use and application. But in this case also, the memorandum should be destroyed, if it is intended only for an exercise of the memory.

In order to improve the memory as an exercise, or to ensure the recollection of any particular subject which it is desirable to remember, it is important to avoid reading or observing merely in the way of gratifying curiosity. We should study and strive to learn with a view to remember; and set our minds not merely to know, but to lay up the facts and objects, at the very time of observation, with the intention of future use and recollection.

It is proper, also, to avoid the pursuit of a multiplicity of topics at one time; which is nearly allied to the habit of reading for mere curiosity. It is impossible for the mind to entertain a vast variety of subjects viewed in rapid succession, with the same effect and interest with which it would attend to and embrace a smaller number, deliberately received and dwelt upon. This quick succession has the effect, and is sometimes even used purposely, by the votaries of pleasure and excitement, in order that each succeeding topic or idea

may expel the one which preceded it ; and so render the mind, except for the very moment during which it is so excited, listless and unexerted, and a comparative vacancy.

In studying each one subject, also, it is a useful practice to select some few important topics and leading features for recollection ; and to give up the endeavour to remember the less important branches of it. The recollection of these most prominent points may possibly recall the lesser ones together with them, by association ; whereas the endeavour to give to all an equal place in the memory, would probably be the cause of forgetting them altogether. The studier of a weekly newspaper is likely to have a better recollection of the year's events, than the reader of a daily one ; and the digester of the more important orations than the plodder through all the speeches of a debate.

For all practical purposes, one thing well learned and completely mastered, is worth more than a hundred merely read and assented to ; and whoever will add to his stock of knowledge one good fact or piece of information, or even one good quotation, each day, perfectly, will never be found an uninformed and ignorant man in any company. Besides, such a practice will lead to a habit both of improved selection and observation ; and while improving at the same time the order and activity of the memory, will furnish keys and handles, by which the store of knowledge may be readily opened, and to which a vast variety of other useful facts and circumstances will be sure to attach themselves. So that the principal aim should be, to learn the one most important matter before us perfectly,

without shame or regret at the fewness of the things which can be so mastered, and the time which is required ; and regardless of the multitude of minor topics left to take care of themselves.

These cautions and recommendations are likely to be useful, as well in those cases where the memory is slow in taking the impression of ideas, as where it is insufficiently retentive. The defect in quickness, however, and susceptibility, is most especially assisted and obviated by the use of repetition ; to heighten the picture, and to strengthen the impression. The efficacy of repetition is so great, that it has occasioned the almost universal comparison of memory to a stamp or impression formed and deepened by the repeated strokes of a die or graver. It bears full as close a resemblance to the addition of successive coats of paint ; which heighten the colouring, and give strength, and vividness, and durability to the picture.

If a name or sentence is to be remembered, it must be repeated over several times, in proportion to the aptness of the individual in recollecting sounds, and in learning by rote. Ideas, and scenes, and countenances, and events, may be in like manner repeated and dwelt upon ; the attention being at the same time withdrawn from other subjects, and concentrated upon the one particular point and object, with the very intention of remembering it.

ARTIFICIAL MEMORY.

THE use of a *memoria technica*, or artificial memory, is not directly to *improve* the memory, but to assist it

in recollecting things which are more difficult, through the means of other things which are more easy of recollection; as, for instance, by associating abstract ideas and truths, and objects not of sense, but of reflection, with objects of external sense, which are in general more easily remembered. There may be, also, a *memoria technica*, of which the instruments employed are not the objects of external sense, but objects of reflection, such as are continually present and familiar to the individual, or easy of recollection by him at all times.

Of *memoria technica*, then, there are three different kinds; namely, that which consists in learning by rote; that which has objects of sight for its instruments; and that which is founded in the order and arrangement of the ideas themselves, which are to be recollected,—or system.

These several kinds of *memoria technica* are respectively adapted to the different ages of life, or stages of the mind, before mentioned; and are applicable to different subjects, and calculated to serve different purposes:—one, for instance, being fitted for permanent use only; the others, in different degrees, for every variety of use, temporary and permanent.

All learning by heart is a *memoria technica*, especially when it is of things which are in rhyme, or metre; for it is the remembrance by means of the mere succession of sounds, of ideas which are entirely foreign to that succession. This, however, is properly the employment of a *memoria technica*, only when the rhyme is merely a vehicle for prosaic ideas, and not when the poetry itself is the principal object.

Grey's *memoria technica*, which is a method of associating sounds by habitual succession, which have each a symbolical meaning, is not at all different in its principle, nor perhaps more useful in its effect, than the ordinary mode of learning long trains of ideas, put into a convenient form of words for learning by rote, whether of rhythm or otherwise, — such as the succession of the kings of England in verse; and the multiplication and pence-tables, which are not in metre.

This kind of artificial memory is properly fitted only for subjects of permanent use. For the labour and time which are required for laying up knowledge in this way being for the most part considerable, it is hardly worth the pains bestowed upon it, if it is to be used only for a temporary purpose. If such things, also, are not brought into constant use and exercise, they are apt soon to be forgotten; and, indeed, scarcely to be ever thoroughly impressed, so as to be ready for immediate application.

It is also more particularly useful, and indeed its peculiar and most essential use and efficacy are exhibited, in subjects which cannot easily be joined and associated with other objects, or recalled by reasoning. Such are the examples above mentioned, particularly the multiplication-table; and such are more especially dates in general; and those things which are wholly without order, and arbitrary: as the number of days in each calendar month, which are commonly remembered by a familiar distich.

It would be well, perhaps, if this species of artificial memory, which is peculiarly applicable in youth, were more generally used in early education for

storing the mind with subjects of the above-mentioned character, rather than with matters which might at a more advanced stage of the mind be brought within the province of a higher kind of memory. A general collection of such subjects, put into a neat and easy verse, is at present a desideratum.

Knotted cords are used by some for memories of the touch. And the Jews' memorial fringes are of the same kind, by which they remind themselves of the five books of Moses; the eighth day for circumcision; the seventh day of the sabbath; the ten commandments; the eleven attributes; the forty days on Mount Sinai; the two thousand eight hundred who are to take hold of the skirts of each Jew, &c.

Simonides' topical memory derived its machinery from objects of sight; and many other schemes and systems have been proposed after the same model.

This species of artificial memory does not seem to be well adapted for permanent use. It supposes a certain number of rooms or places, in which the ideas to be remembered are imagined to be deposited. But upon so simple a plan (and such only is fitted for ready and immediate use), it is impossible but that by lapse of time, and the accumulation of a number of different topics in the same imaginary places, an obliteration of the old topics should be effected; though some advantage to the memory would doubtless be derived, even at a distant period, from the mere circumstance of their having once been arranged, and the attention having been originally exerted in placing them.

But this species of memory is for the most part

proposed as applicable for present and temporary purposes; and to such, no doubt, it is properly adapted; and when so employed, is capable of affording very useful assistance in many of the most important and interesting pursuits of life.

I was once informed by a friend who was a lawyer, that without any intention of his own, and indeed without his being able to help it, every law case upon which he was occupied, presented itself before him as in a landscape; the several points and topics of the subject occupying the several places; and that it was of essential use to him in the conduct of his case. This example shows how very closely this particular form of artificial memory is framed according to the natural processes of the mind. The impressions of sight are the most vivid of any; and the associations which are formed with such objects are accordingly the most useful and assisting to the memory.* This is accordingly the most common and frequent instrument which we employ, in all the ordinary occasions of life, to treasure up and recall the objects of attention and memory. It is also the most active and ready instrument which we have for use in all purposes of business

* One reason why we forget so many of our dreams is probably this:—That in most of them the scenes and localities also are fictitious, as well as the events which seem to take place in them. In consequence, the supposed events are not associated with any real scenes and places, which, by presenting themselves again to the eye, might recall them. If a real scene were exactly presented in a dream, a subsequent view of it would probably recall the whole circumstance; or perhaps even the mere thought of the same scene or locality. And in fact such dreams *are* the most easily remembered.

and dispatch; the services of which it is the most difficult of any to dispense with, and to supply by a substitute. The whole of that stupendous instrument, writing, together with printing, which is a branch of it, is only an extended use of the artificial memory of sight;—the memory of the whole world as it were, as well as of individuals.

It has been supposed by some persons that this form and instrument of memory increases in power continually through life; or at least up to that period at which the mind attains to its greatest strength and energy. It must be questioned, however, whether this is really the case; and whether it be not, like the memory of the ear, the most active in youth, or at least at a season not much later than the other. It certainly is not the peculiar and characteristic instrument of the highest stage of mental cultivation; and if it happens to be in some persons particularly powerful at a later period of life, it may more probably be conjectured that its vigour has been protracted by constant exercise and cultivation, as the habit of learning by rote also may be, than that it is exercising its natural power and prerogative in its own proper province. There are many certainly who never attain to the highest objects and cultivation of the mind, and whose greatest attainments are in objects of sight and of external nature. With such the memory of sight must ever hold a principal and increasing place, and continue to grow into more and more importance, with the failure of memory derived from the other senses. For it is to be observed, that this species of memory, though it may fail to advance, or cease to hold the

preeminence, does not so sensibly decline and become fainter with the increase of age, as does that of rote, so long at least as the mind and senses remain healthful and vigorous.

Great assistance and improvement then may be rendered to the memory, by the studied and habitual association of ideas and occurrences with those objects of sight which happen at the time to be present in conjunction with them. This is but adopting and cultivating to the best purpose the natural course and operation of the mind ; and this species of memory, when improved as much as possible, and perfected into a habit, cannot fail to become a universal and ready agent of the easiest application, and to produce in regard to most topics of ordinary consequence the most useful kind of memory.

The same course of exercise and improvement might be pursued with regard to the associations which are furnished by all the other senses ; and many are the uses to which they are specifically applicable. But they are not of sufficient generality and importance to call for particular and separate notice.

The highest species of memory, and that which is peculiarly fitted to, and operates in the highest condition of the mind, and the highest class of subjects, is that of system, and rational arrangement. This is an arrangement and association, not according to the actual and fortuitous juxta-position of objects and occurrences, but a voluntary and studied association, according to a real or supposed proximity and alliance of character and reason.

This likewise is, to a certain extent, the natural

operation of every person's mind ; but it operates principally in those minds only which have attained to a comparatively high state of cultivation. It is suited also more especially to subjects of a loftier, and particularly to subjects of a moral character ; but all subjects of reflection, and such as derive a small proportion only of their topics from the external world, are within its proper and peculiar province. From the nature of its subjects, and also of its arrangements, it is less necessary to this species of memory that ideas should be collected by personal observation, and in the first intent. For they are such as are to be weighed and digested rather than experienced ; and from which some principle, or some important feature, is to be chosen and extracted, which is to form the link of connection, and according to which the arrangement is to be made ; rather than that they are to be imprinted according to their external pattern and appearances, with all their immaterial parts and accompaniments, and in all their fortuitous and less essential colours and features. From this want of reality and vividness in the images which it entertains, from the extent, and complication, and multifariousness of the arrangements which it uses, and from the want of real and present association in the ideas themselves when they were originally received, it follows that this kind of memory is seldom ready and rapid in its exercise, but in general slow and tardy in its operations. It is useful, therefore, in solemn and deliberate debate, and in quiet study and retirement ; these being the occasions also which are best suited to the prosecution of the subjects which are its most proper department.

System enters also into a multitude of other subjects besides those which are its peculiar and exclusive province, and becomes the instrument of a most useful technical memory. All the kingdoms of nature, and the physical sciences, have been made the subject of systems and arrangement ; without which it would be difficult to prosecute the study of them to any considerable extent. Every theory that we form becomes the basis of an arrangement, upon which we suspend the multifarious phenomena by which we illustrate it ; and every arrangement which is not founded upon truth and reason, and the real intrinsic nature of things, ought only to be regarded as a mere technical memory, by which the recollection of a multitude of topics is conveniently facilitated.

It may be again repeated, once for all, and with reference to all the above branches of mental operation, that the improved use of this and of every other faculty must be exercised into a habit, before it can be used to any very good purpose as a logical instrument. And with respect to memory in particular, whether natural or artificial, the application of the above instruments on particular occasions only, and without an habitual exercise of them, however it may assist and secure the remembrance of the particular matters and events, is not of itself sufficient, or even calculated, to improve the faculty.

BOOK II.

PART II. THE EXERCISE OF JUDGMENT.

LOGIC is the art of judging, not the art of arguing. That is, it is not the art of persuasion, and of putting facts and knowledge into the form of proofs, for the purpose of producing conviction in other people's minds;* but it is the art of exercising the apprehension with penetration and judgment, so as to discover and appreciate the truth: which is the proper and the highest province of reason.

Judgment is the use and exercise of experience. It is an enlarged mind: an extensive view of nature: the use of an abundant collection of examples and observations, of facts and experiences. It is the bringing as many reasons and recollections as possible to bear upon the subject in question, for the purpose of assisting the apprehension in arriving at an adequate and correct knowledge.

It seems that, in consequence, sound judgment is less allied to dispatch and promptitude than error and prejudice are; for a more extensive process is carried

* But it will be shown in the 4th Book, that the principles of rhetoric, being used in reasoning and persuasion, are in effect a branch of Logic.

on in the mind, which requires time for the performance of it. No judgment can be considered as being really perfect, and actually sound and just, until it has embraced and estimated, particularly and individually, all the possible points and circumstances which can have any bearing upon the case. This is within the province only of Omniscience. Man, therefore, must of necessity be content with imperfection, and act in some degree in blindness and ignorance. In some measure also we *must* act from prejudice; as every belief must be prejudiced, of which we have not examined all the reasons, and given due weight to those opposed to it. But action must in many subjects precede investigation; for our souls and bodies would perish while we were inquiring. It is in the midst of this darkness and difficulty that logic essays to give precepts for our guidance; and by pointing out the proper method, to increase the probability of our arriving at truth.

The method by which we are able, with our limited capacities, to embrace and to apply the greatest possible number of experiences, is not by the distinct remembrance of particular facts and individual cases. These are especially applicable and necessary for the purpose of argument, and to produce conviction in the minds of other people. But the method the most practicable for forming the judgment and improving it as a useful instrument, is the collection and storing up of classes of facts, and general principles derived from them; which, the more they are undefined, and the further removed they are from particular examples and instances, the more extensive they are in general, and

the more likely to be just and applicable. In the ultimate state of this generalisation they become, as it were, mere impressions and habits, being wholly incapable of enumeration and analysis. Consequently the justest judgment and opinion, in many subjects of extensive bearing, is frequently that one which will the least admit of its grounds being stated and enumerated, and has the character, therefore, of a mere dictum.*

For judgment, like all the other faculties, is the subject of practice and habit ; and these are necessary to its use and perfection. It is the object so to fashion and regulate the law of the mind, that it shall operate correctly and skilfully ; and so silently also at the same time, and naturally, that its process should not possibly be observed and analysed. This is that intuitive judgment, and those suggestions of common sense, the nature of which has so frequently been inquired into and debated ; which are nothing else than our opinion formed from undefined experiences and impressions, and the application of the most general laws and principles to the subject offering itself :—that “ practical judgment ” and tact, which cannot any more be traced out and defined in its operations than any other improved habit, or art, or taste, or accomplishment.

From hence it follows, that a man of sound judgment must often have less ability than people in general to convince and persuade ; since it would be infinitely slow, and tedious, and unacceptable, even if it were possible for him to enumerate all the grounds

* See page 124, note.

upon which he rests himself in support or in defeazance of an opinion,—weakened and rendered so insipid as he knows them to be, by a multitude of qualifications, exceptions, and limitations. And a few of them only, if thus stated according to truth, thus weakened and qualified in expression, and receiving only their just weight and estimation, would be without effect.

On the other hand, the fewer the experiences the mind embraces, the weaker the judgment. At the same time the reasons and general principles which it uses are farther removed from mere impressions, and approach nearer to being actual examples and facts. They are, at the same time, also more distinct and vivid, and much less qualified by collateral experiences and exceptions. The effect of which is, that such reasons and arguments are more exaggerated and captivating, more picturesque and positive, and much more quickly and easily expressed; and the person who uses them is a winning advocate: the more so, perhaps, the farther he is removed from discretion and sober judgment.

Men of sound judgment are also sometimes more backward and less disposed than others to promptitude in action, from the much greater number of reasons and motives which they enlist and estimate upon both sides of a question. Analogous to this is the general wisdom, and attendant slowness of the measures which are effected, in mixed and representative constitutions. For since many have a voice, and the views and interests of many are to be consulted, a vast number of reasons and arguments are brought together, and listened to, upon each question; by which greater

delays are occasioned than in a despotic government, and by which at the same time wisdom and truth and sound policy are elicited.

Sound judgment then is exercised in placing a subject in its true position: in viewing it in all its true relations and bearings: in going directly to the point,—in conduct and in truth. It is built up of a collection of experiences, drawn, in the first place, from all nature generally, and next from each particular branch and subject of knowledge. This catalogue is in some respects the same thing as the *Prima Philosophia*, that highest philosophy, of which Bacon speaks with interest, anticipating its discovery; though there is nothing in the real nature of things which exactly meets his conception, of a collection of nature's laws and principles universally operative, without direct application to any particular subject.*

But these principles which furnish and constitute the judgment, are in the first place experiences of the most general and universal of nature's laws, and the mode of her operations; the most universal of which, however, are each of them applicable only within a certain range of subjects. In the next place, of the

* If the pleasure arising from a musical quaver is the same as that from the playing of light upon water, it is a principle of human nature. If the Persian magic was a true reduction of the principles of the universe to the rules of government and sublunary concerns, then it was a realisation of a *Prima Philosophia*. But the progress of discovery only the more strongly leads to the conviction that this was nothing more than the perversion of a false analogy, and a distortion of nature, for the particular purposes of priests and politicians.

These are instances which Bacon adduces.

constitution and capacities of our own nature and faculties, and of their relation to the former, which are among the subjects of their exercise. Of these some of the most important in their character and consequences are the prejudices; a knowledge of which is highly essential to the due exercise of judgment, in order that we may allow for their disturbing influences. For the knowledge of, and allowance for the operation of prejudices, is an act of judgment; and distinct from the cure of them: which is the subject of another branch of logical discipline. Besides these, there are principles and experiences which are essential to judgment, in each branch and division of knowledge, and profession.

These laws of nature I now proceed to treat of.

But since these experiences of nature in many instances resolve themselves into mere impressions, and are therefore not so much to be enumerated as they are to be felt, this small collection is merely for the purpose of example, and of instructing and leading the mind into the proper method of forming to itself a proper logic. And these examples are chiefly taken in such subjects as are the most apt and likely to affect materially the cause of truth, and to influence the judgment in a variety of topics.

One person also can do little more than attempt to give the particular law of his own mind. So that in this respect also this catalogue of principles and the laws of nature, is to be esteemed imperfect.

[LAWS OF NATURE.

1. COMPARISON.

OF things present we observe the differences; of things absent the resemblances. In other words, if two things or two persons be both together present to us, we are naturally inclined to notice the differences which distinguish them one from the other; if both or one of them be absent, or generally, if they be apart one from the other, the points of resemblance are those which naturally strike us most immediately.

This arises at once from the activity and the infirmity of our apprehension. For the memory being weak and imperfect, it recalls only those absent features vividly to the recollection which are suggested by some association. When both objects are present, there is no exercise for memory; and the attention then busies itself in that which affords it the most lively exercise, namely, the differences.

A knowledge of this principle must assist us in forming a more correct judgment of things touching their resemblances, according to the particular situations and relations in which they are placed, and other circumstances.

2. IMPERFECTION OF APPREHENSION.

There are differences in our own handwriting almost every time we write ; which differences are often perceptible only to ourselves. There are similar differences in manner and conduct.

Members of the same family frequently appear so much alike to other people, that it requires a long and intimate acquaintance before they can distinguish them. Yet their own relations never mistake them ; but on the contrary they see only the differences by which they are distinguished : through the operation of the before-mentioned principle.

If then there are distinctions between individuals, which cannot be discerned by general observation ; and differences in the same individual, which can be perceived and known only by himself :—how imperfect must many of our ordinary perceptions be ! And since the degree of intimacy which we have with ourselves is confined to but one single individual ; and that which we have with our own family, to a very small number ; and the degrees of intimacy in more distant circles, the sphere of which even in its utmost extent is comparatively but a very limited one, become continually and rapidly fainter and weaker, how can we with propriety think or talk with confidence of our knowledge and certainty of anything ?

The essential differences of phenomena, events, and circumstances, must frequently escape our notice. Our judgment and conduct in cases which depend upon

them, therefore, must be liable to error, and should be without too great confidence.

3. MULTIPLICITY. VARIETY.

There is no law of nature which so strongly contradicts our natural capacity and constitution, and to which we so voluntarily blind our eyes, as her infinite variety and multiplicity; by means of which she continually eludes our finite faculties. We in consequence torture her perpetually into that simplicity which is compatible with our own understandings; and this is a never-failing source of errors in judgment.

No two faces or characters are exactly alike. The sounds of the vowel letters vary infinitely. How few persons there are, who, in studying foreign languages, or their own, do not suppose that there is an exact and definite sound attached to each letter! Whereas in truth the sounds of every one of them are varied in different words, in different positions, in the same position, in the same word by different persons, in different circles, in the same circle, and by the same person at different times, and even from day to day, according to taste, fashion, and caprice.

How few there are who do not suppose that the passions and affections are of a definite number: perhaps ten at the most! Whereas it would not take long to enumerate twenty; and, in fact, they amount perhaps to hundreds. The great variety of characters which these form, will not seem surprising to those

who will calculate the possible number of combinations arithmetically; and the variety is still infinitely increased, beyond the powers of arithmetic, by the innumerable shades of difference in each of them, in degree and proportion.

The possibility of still inventing new tunes may seem surprising, until it is recollected that the permutations on only eight bells, are more than forty thousand:—on two octaves, upwards of a million millions. And besides this, there are twelve keys and two modes; which still further multiply the variety almost to infinity.*

In moral subjects this law is not less wonderful, and still more important.

The variety in the kinds of beauty is infinite; and so is also the variety of tastes which appreciate them. This is a wise and beneficent provision in the order of nature. Yet there are those who would willingly disturb and disorder it, by prescribing to other people's feelings and sentiments, and setting up their own fancied standards of taste. Such a contradiction and denial of one of the most beautiful and admirable of the contrivances of creative power and goodness, is a scarcely less gross impiety than ignorance.

Many persons suppose that there is a definite and exact signification in words; little aware that the infinite variety of ideas and thoughts could never possibly be represented accurately by a few thousand words, and by the limited extent and powers of language.

* See the Permutations of twenty-four letters computed by Tacquet; Hermes, 327.

The success of others causes jealousy: from an impression that it is an impediment to our own advancement; which could hardly be the case, if we were impressed with a proper knowledge of the endless variety of talents which are to be found existing in human nature, and of the objects and occupations corresponding to them: so that no two persons, perhaps, ever attained to eminence for exactly the same kind of power and talent in exactly the same line. There is always room enough in the world for the exercise and success of all the talent, ingenuity, and excellence that exist in it, at any one time.

There are twenty different talents at least, required,—and found too at all times,—in the legal profession, for excellence,—as a judge, in civil matters, and in criminal, in bank, and at *nisi prius*, in law, and in equity, in practice, and in principles, as a chief judge, and as a puisne judge:—among advocates, for a leader, for a junior, for a speaker to a jury, for a speaker to the court, as an advocate in serious, and in jocose matters, as a civil advocate, as a criminal advocate, as a pleader, as a writer of opinions, as an author, as a compiler, as a commentator, as an analyst, as a legislator. For all these distinct and different talents, and for very many more, there are departments found existing in this one profession. There are as many perhaps in medicine; as many also in the church. There are many in almost all the ordinary manual trades and occupations. There are twelve different departments and divisions of labour at least, in the manufacture of a knife; there are fourteen in the making of a pin.

Now infinite error, jealousy, and misjudgment, are the necessary consequence of an ignorance of this law. And even when we are acquainted with it, our finite powers and capacities can never approach to being able to cope with it. The only course and remedy that we can pursue, is to become fully alive to, and impressed with its existence; and to use this impression as an essential feature and ingredient in all our calculations. To view all nature and the universe, or even a limited portion of them, and to contemplate them in their infinite multiplicity and variety,—without which judgment cannot be actually perfect,—is the province only of Infinite Wisdom.

4. UNDEFINABLENESS.

UNDEFINABLENESS is in general the characteristic of the subjects of judgment; distinguishing them from the subjects of mathematical investigation, which do not at all admit of the exercise of judgment.

This law arises out of the foregoing law, of variety and multiplicity; and the multitude of individual and vanishing differences which characterise nature.

For example. Colours are undefinable. And no accuracy or labour could ever describe the differences which are important to the eye of sensibility and taste.

What care or study can define the differences of the vowel sounds? As of the letter A, in bat, what, hate, enumerate, Abraham, all, father, tyrant. Here are at least eight different sounds for the same letter,

and they are only a few of the very many minuter shades of difference perceptible by, and necessary to, an accurate ear.

Lepsius' standard alphabet enumerates thirty vowel sounds, and forty-eight consonants. And there are many more shades of difference, which rules and description cannot distinguish. There are fifty-two letters in the Russian alphabet.

The undefinableness of words and language has been already treated of in the First Book. One only of the examples there given shall here be repeated. The expression, "the world," has, and has for ever had, different shades of signification, to different nations, to the same nation, to each individual, to the same individual, to men of fashion, to men of a low, of a middling, of every other sphere of life, to men of science, of philosophy, of religion.

Even the five senses are not clearly and accurately to be defined or distinguished. The characteristic test of matter or substance is in general, that it is sensible to touch. And such things have generally the property of gravity. But is heat matter? For it has no gravity. Is it properly felt then by the touch? Pepper bites or burns the tongue. Is that a sensation of the taste or of the touch? Or is it of neither? The seat of this sensation is in the tip of the tongue; the seat of flavour is in the roof of the mouth, or in the nose; which seems to confound taste rather with the smell, than with the touch. Or are flavour and taste two different senses:—the one more nearly allied to smell, the other to touch?

Is vibration felt by the nerves of touch? And is sound vibration? Is it certain that colour is not also vibration? The passions themselves are a kind of feeling; at least they are accompanied with a certain internal sensation, with bodily pleasure and uneasiness. Are not these also in some measure, therefore, allied to touch?

So that the province and limits of the bodily senses are not perfectly definable.

Still less are the passions, affections, and motives, definable exactly. They blend one into another. And again, they are limited and modified in each person's own particular experience, according to his temperament, constitution, and character.

The different kingdoms, and classes, and orders of nature, are not accurately to be distinguished; as the animal and vegetable kingdoms: the orders of birds and quadrupeds. This, as applied to the external world, has been called the law of continuity; which in its abuse has given rise to an abundance of metaphysical subtlety. Its true character will be treated of under the ninth general law.

5. COMPROMISE.

ATTENDANT upon the variety and multiplicity of nature, is the law of Compromise.

Every subject partakes, and is partly compounded of the nature of all the other subjects and circumstances by which it is accompanied; and gives up in consequence something of its own individual character:

—much in the same way that the colour of an object partakes in some degree of the colours of all those which surround it.

Thus the position of the face, in a picture which is out of drawing, is determined by a compromise between the different directions of the features. The apparent positions of any two objects which are in apposition in the field of sight, derive each of them something from the position of the other; the nearest of the two appearing to be at a greater distance, and the farthest to be nearer to us than it really is. This is the reason why objects standing upon an eminence and projected against the sky, appear to be further off than the reality, and consequently enlarged.

In preaching, the proper tone and manner to be adopted, is not *one*, either of authority, or of indignation, or of pity, or of affection, or of humility, or of entreaty; but one which is compounded of some or all these: being a compromise between the expression of the majesty of the subject, of the unworthiness of the instrument, and of the other sentiments which exist between the minister and his congregation, according to the occasion. In reading a drama, the tone and manner is compounded both of the passion of the character, and of the feeling of the reader, (which may be in opposition to that of the character represented;) qualified also by the circumstances of number, local position, and the supposed sentiments of the hearers. Even acting is modified and has peculiar relation to the nature and circumstances of scenic representation, which is called stage-effect; and the best acting is not a perfect representation of real nature.

In policy also, and propriety of conduct, a balance between the immediate good resulting and the ultimate consequence, is requisite to a proper judgment :—as, in law, we adopt a compromise of advantages in laying down rules and principles ; since every rule which is beneficial to society, may be an injury to some particular classes or individuals. The same also in all legislation generally.

In theory, the law does not regard the moral crime or sin, but the public injury. Yet in practice a difference is inevitably made in the awarding of punishments, through the intervention of the feelings, according to the moral magnitude and heinousness of the particular offence.

In moral subjects more especially, all the minute circumstances and relations of the particular case must be observed and estimated, before the fine line of truth and judgment can be ascertained. And truth may be pointed out indeed, but it can never be accurately defined and delineated by a few leading features.

6. IMPERFECTION. INEXACTNESS.

NATURE is exact and uniform only to a certain extent.

The two sides of the face are not exactly alike. One side of the body, in general the right side, is almost always larger than the other. Perhaps there is not any such thing in nature as a perfect circle.

Ordinary observation, and the faculties in general, are adapted by a correspondent law to this want of

exactness; and we do not, therefore, readily and habitually perceive these trifling deviations from order and regularity.

Any minuteness of observation and distinction beyond the point and limit which this law indicates in each subject, is in the nature of a refinement; and all rules of practice and conduct must, to fit them for use, be accommodated to the standard which nature thus exhibits to us. Law, which is the most practical of all moral sciences, excludes this refinement: as in the following example. If I always pay ready money through my servant at the day, it is the tradesman's folly and loss if he chooses to trust her. But if, by paying weekly, I encourage him to give her credit from week to week; then if she omits to pay, and obtains credit for a month, I am liable to repay the amount, though I have supplied her with the money weekly, and she has kept it. For the distinction between trust and no trust is obvious; but the difference between trusting for a week and for a month is not equally obvious, and not within the limits of ordinary precaution.

Painters and architects, and professors in general, who devote themselves exclusively to one study or art, for the most part cannot help viewing their own peculiar subjects with the eye of refinement. The most eminent among them, however, rise above this prejudice. But such as are injudicious, and unable to resist this natural defect, are not qualified to suit their style and productions to the general taste. This is peculiarly the case with teachers of grammar, of style in writing, and pronunciation. And in general, the nearer the subject

approaches to being a matter of general use and practice, the more injurious will be the consequences of this mistake.

By the habit of refinement beyond the proper limits, we contradict nature, and do ourselves a moral injury. It is a common topic to seek for perfection in all kinds of subjects, theoretical and practical. But this should be avoided, as being injurious to the mind. In a common instance, the desire to possess a perfect watch is a foolish fancy. The habit of watching it from day to day, and of noting its hourly variations by one or two seconds, gives a turn for exactness, and a habit of observing very minute differences, which unfits us for the pleasures and business of life. The requisition of mathematical proofs in moral subjects; the search after perfect and unchequered happiness; the desire of exact standards, of perfect models, of complete systems,—all these are contrary to nature: whose essential and characteristic feature, in a moral point of view, is imperfection and variety.

7. MYSTERY.

INTRICACY and mystery in her laws and operations, by which she eludes and sets at nought human wisdom and penetration, is one of the essential principles of nature, which should ever be kept in mind.

The soil is fertilised by salt; grass is nourished and supported by the soil; animals by grass; and man by animals:—yet man could not live and be supported upon grass; nor animals upon soil; nor grass upon

salt: much less could man derive support and nourishment from the soil itself. There is in these successive processes and preparations of the same matter, which continually raise it in the scale of organisation, and fit it for higher purposes, some latent power and principle, an intricacy and mystery, which mocks the science of chemistry altogether, and even our conception.*

The *punctum saliens* in an egg contains the principle of life, the principle of the form of the animal, its kind and species, its individual character:—the principle of life contains within itself, and operates, through their appropriate nerves, the principles of thought, of sensation, of motion, of growth, and nutrition; through the nerves of the five senses, it has the capacity of different kinds of perception; through the different glands, the power of secreting various and distinct fluids:—yet we cannot discover the sufficient difference between the respective nerves, the respective glands, nor even the difference of structure in youth and old age, in life and death. What, then, can we discover or conceive in respect to that minute principle of life, which contains the elements and principles of all these differences, within the compass of a point?

These are subjects which surpass our powers and capacities, and defy our intellect.

These are the operations of material organisation.

* There have been some recent discoveries of compound elements; namely, such as are elaborated by vegetable organisation for the better nutrition and support of animal life. But we are no nearer the knowledge of how these mysterious agents are produced, or how they operate.

What can we expect, then, to understand or fathom respecting the *nature* and organisation of the mind and passions? It is plain that we must seek to acquaint ourselves with these only in their practical effects and operations.

8. POLARITY.

THERE are two poles or ends of every subject of knowledge, at each of which it may be handled; but which cannot be brought together.

The brain is the seat of the passions and faculties; but the anatomy of the brain can never lead to a better knowledge of their operations: neither could a perfect knowledge of their operations throw any light upon the anatomy of the brain. Anatomy, in like manner, can never give a knowledge of the laws of life, of digestion, and medicine. Surgery and medicine are both practical sciences, and have one common object, which is the cure of the body; yet, though they are such near and necessary colleagues, they should be considered and treated as essentially distinct.

A knowledge of the structure of the organs of voice cannot become the means of producing the most pleasing sounds. The science of harmonics cannot give the power of original composition in music. The theory of colours could never teach their tasteful use and application by a painter.

The best chemist will not have the greatest knowledge of the powers and operation of medicines; and agricultural chemistry will never make the best farmer: though the knowledge of the one may, in

some cases, lead to experiments and observations which may improve the practice of the other.

In all these cases, the studies may be brought into very close relation, and may assist and promote each other by analogy and suggestion; but they never can be brought into actual contact, even by the finest analysis, any more than the concave surface of a mirror can become identical with its convexity, by making it continually thinner. They are essentially different modes of viewing and examining the same subject; and as it were from its opposite surfaces.

This is what Solomon says, "No man can find out the work that God maketh from the beginning to the end." We may examine the two ends, as of body and life, will and action, anatomically, practically, morally, systematically; but there is a dividing interval, an undiscoverable link, by which we cannot bring them together.

The use of the term polarity, and two ends of a subject, is incorrect and metaphysical. It is intended only by way of metaphor and analogy, to express the very essential distinction which exists between the different modes of treating the very same subject-matter, according to the end and object in view; and particularly the difference of office and character between the sister-branches of art and science, of theory and practice, of external and internal nature, of the material and the moral world.

If this law of nature were understood and appreciated, it would banish a multitude of confusions and metaphysical subtleties which enter into philosophy; and the departments of study being kept separate and

distinct, greater success and progress in each might reasonably be expected. We should not then see human nature dealt with by divisions and analyses of the mind and faculties; and it would then be understood that *systems* of ethics, and *theories*, can never tend to the advancement of moral science and improvement; but that it is essentially and necessarily a practical subject: to be taught by examples, and proverbs, and sentences: to be understood and perfected by practice, self-discipline, and experience.

9. SYSTEM. CLASSIFICATION.

THERE is not in reality and in nature herself any such thing as perfect classification; but such arrangements are chiefly founded and fashioned in the mould of our own minds and nature. They may, indeed, be framed and beneficially employed, so as to fulfil the objects of those who use them; and principally for the purpose of assisting the infirmity of our nature in respect of memory. But this special purpose must be understood and confessed, and the systems themselves must not be looked upon as founded in nature; for in so doing, we cannot but encourage them to restrain and fetter her, and to give to her productions the colour and complexion of our own minds.

The ten categories of Aristotle, the three of Locke, the two of Hume, &c., are as little founded in nature, and partake as fully of the characteristics of their several inventors, as do those of the mathematician,—the *data* and *quæsitæ*. With us the categories in most frequent use, are A, B, C, &c.; and they are generally

the most useful: as not impressing the features and complexion of any theory or opinion upon the subjects of the arrangement.

It is true that nature separates her subjects into grand divisions, — as into the animal, vegetable, and mineral kingdoms; and these again by actual distinctions, — such as the original parent animals, from which all the species of animals upon the earth are descended. But this is nothing more than saying that the hand is divided into a thumb and four fingers; which last are again distinguished one from another.

But it is into the subordinate divisions that error generally enters; in supposing that it is the law and principle of nature to subdivide herself into orders and classes, and genera and species, regularly and continually, characterised each of them, and defined exactly, by essential and relative qualities, existing in and intended for this purpose by nature herself. This is much as if a person were to busy himself with a classification of thumbs, or noses, or fore-fingers; or were to class men according to the essential distinction of so many feet and inches in height.

Every mineral and compound mineral substance has a particular form of crystallisation; and classifications have been made of this whole kingdom of nature, upon the basis of these properties. These classifications, however, are confessedly artificial; nor are those much less so which are founded upon the supposed antiquity of the mineral strata. Chemical arrangements, also, can only take in succession some special qualities and peculiarities which belong to the several substances which are arranged under them; the order and even

the divisions of which are changeable and arbitrary. Indeed, it now is generally admitted that chemistry is capable of no natural arrangement; and the study is to treat it as a collection of properties, which require to be brought together, as it were into a dictionary, according to some artificial order by which they may be conveniently referred to.

The vegetable kingdom seems to have obtained a more perfect, definite, and permanent arrangement than either of the other two; and this, at least, might therefore be expected to submit to the test of truth and reality, and to bear the stamp of nature. But this system was admitted to be artificial, even by its own inventor; and it is, in fact, nothing but a division by number, a distinction by units,—according, as the flower, where one can be distinguished, has so many petals, and pistils, and stamina. So that these classes or categories, of one, two, three, &c., the nearest approaching to those of A, B, and C, which are the most arbitrary and artificial possible, have proved to be the most useful and the most enduring arrangement which has been imposed upon nature.

But here, at least, it might seem that we have an arrangement of nature's own choice and framing, and a plan of her works which may be supposed to enter into her more complicated contrivances:—particularly since the species which fall under the same class in botany, have sometimes a similarity of character and property; as, for example, poisonous plants are mostly to be found under the fifth class. But this is nothing more in reality, than that nature always adopts and uses the same means to fulfil the same objects. The mode in

which these forms minister to their several purposes can never, in any of her higher operations, become known to us. But in all those subjects in which we can follow her, this uniformity exists. And this consistency and simplicity in her operations—according to which she always fulfils the same object by the same and the simplest means, and is always simple or complicated according to the simplicity and intricacy of her subject—has fallen in with our endeavour to find in her a plan and system suited to the requisition of our own minds and our natural incapacity.

But nature goes directly to her object, according to the individual design and purpose which she has to accomplish, without regard to the form and construction which she has given to her other works,—which coincide only so far as the similarity of their object has been carried into effect by the same means. And this is the law of creation,—that the universe is one great and complicated whole; each part of which fulfils its own individual purposes by the simplest means, and agrees with all the rest in the uniformity and perfection of these instruments. True wisdom must penetrate this design and operation in each individual instance; and the only proper use and object of systems should be, to assist the memory and our natural infirmity.*

10. INDIVIDUALITY.

IN immediate connection with the last principle, and, as it were, resulting from it, is the law of individuality,

* See Grindon,—Life and its Varieties. Chap. 25. The Chain of Nature.

—the meaning of which is, that every object in nature is individually characterised and distinguished, and must be viewed and estimated according to its own peculiar features, before a perfectly right judgment can be formed of it.

Every phenomenon, example, person, circumstance, is individually different and distinct from all others. No two faces or characters are exactly alike; no two occasions or events, in private life or politics. And according to these differences ought to be our judgment of them, and our conduct. For if we adopt the same rule of action where the circumstances are different, we must fall into some degree of error.

For this purpose, then, we should examine every case and object, to discover its peculiar differences; and till these are adequately arrived at, our judgment must be imperfect. This, however, is beyond the reach of our capacities. God only can regard all things in these their individual characters and features; whose wisdom alone, therefore, and conduct, can be perfect.

But *we* are constrained to frame for our own use general rules and classes, which serve us for guides and monitors in all the several cases which fall within their application. These, however, must never be looked upon or considered as perfect and unvarying, like mathematical principles; but in each case the peculiar differences should be sought out and distinguished, as far as our limited faculties are capable.

There are two successive steps to be made, therefore, in the approach towards wisdom, whose course apparently is in opposite directions. As children, (whether in years or intellect,) we regard the few ob-

jects of our acquaintance as individuals, and as the only things of the kind existing in the world, and derive little instruction from parallel examples. We regard ourselves as the centre of society; our own narrow circle as the chief and most important; and we act according to the suggestion of the moment and the particular occasion. The first step, then, in philosophy, teaches us to form rules and general conclusions, and to act according to wider principles and experiences. It teaches us our real position in society; the vastness, and at the same time the consistency of the universe; the universality of the laws of matter, and of the principles of human nature. The mind becomes lost in vastness and multiplicity, and in its own insignificance. It becomes, as it were, too large for itself; and endeavours to grasp and comprehend everything by means of the most universal and unalterable principles. It ceases to regard the world in its individuality of feature, and views it only in masses; and strives to embrace the whole circle of creation by attending only to resemblances, and excluding all those differences of feature, and peculiarities, which give reality and character. Such a comprehensive view and universal principle, could it ever be attained to and perfected, would no more represent the reality of nature, than the thin line of the circumference, independently of its contents, would constitute the circle.

The second step in philosophy, which is real wisdom, teaches us to descend again to particulars, and to regard objects as individuals. It acquaints us with the importance of individual differences, in conduct and circumstances; and of weighing the peculiarities of

every subject before determining upon it. It teaches us to regard ourselves again as individuals in the world, and as the centre of the universe :—not in the false, and narrow-minded, and illiberal sense which we at first entertained of our own importance, but in the same sense in which every other individual in the whole creation is himself also a centre,—that is, that every feature and object, and truth and principle, is tinged with the complexion of his own mind and faculties, and differs, therefore, in some degree in the appearances which it presents to each person, according to his own individuality of character.

By this means we are taught, that not one diet or medicine, not one plan of life or of happiness, not one standard or model of proportion or character, is the best, and best suited to all persons and occasions ; but that wisdom is warranted in her infinite variety of works and features, and justified of all her children.

This principle of individuality is very general and curious in its application, if it be followed out in all its ramifications. Perfection has an essential connection with individuality ; and it is a principle of first importance in the fine arts and the beau-ideal, which alone properly aspire to perfection. Unity is the first principle in painting : whether of design, of action, of light, or of colouring. The perfection of sculpture is exhibited in single statues ; the Apollo is a higher work than the Laocoon ; and the master-pieces of painters have been single figures, and their highest achievements portraits. The real perfection of music, also, is exhibited in a single voice or instrument ; the individual perfection of which, in tone and expression, is lost partly by combination.

11. STANDARDS.

It follows directly from the foregoing principle, that there are no such things as perfect patterns, and models of perfection, and universal standards, to be aimed at and imitated upon all occasions. Such things are opposite and contradictory to the laws of nature, and to her intentions.

Even in the most exact arts and sciences, for example,—Greece possesses no two specimens of architecture exhibiting exactly the same composition or proportions. Each one is nicely suited and accommodated to its own precise object and intention, and its peculiar position and accompaniments. Yet modern science has endeavoured to deduce from them a fixed rule of proportion, by taking the medium of all these examples; and has framed a model, or standard, which, being supposed to be capable of satisfying the eye in all the various situations which may present themselves, is in effect not adapted, with real truth and taste, to any one of them.

Albert Durer framed what he supposed to be a true standard of the proportions of the human body. But it is exactly suited neither to an Apollo, nor a Venus, nor a dancer, nor a runner, nor a boxer, nor a gladiator; neither, perhaps, to the representation of any one being whatever in any one real situation, under any existing circumstances.

This is like a child seeking for some one tool or toy, which should suit him equally for all occasions and purposes: a schoolboy trying to purchase a fishing-rod

which might serve him equally well for all kinds of fishing : like a critic setting up one model of taste : a connoisseur one model of beauty : a politician one model of government for all nations : a moralist one pattern of character and life, one standard of attainment or happiness. As well nearly might the painter always paint the same landscape ; the poet or dramatist represent the same scene and event ; and the biographer describe always the same character.

Of happiness, as of all other things, there is no perfection ; neither is there any possible definite standard of it. But one person is born to a greater and another to a less degree of happiness, by constitution and circumstances ; and not to different degrees only, but to happiness differing greatly also in kind and quality. That system of ethics, therefore, is the best, and is alone capable of being confirmed and verified by its effects and usefulness,—not which should profess to enable every one to attain to a perfect or to a certain equal pitch of happiness, but that which shall enable each person to be as happy as possible, with his particular constitution and temperament, and under his peculiar circumstances. Imperfection is a law of human nature. Every one, therefore, who hopes to grasp perfection, and gives his study and expectation to it in any subject, essentially opposes a law of his constitution, and unfits himself for this world, and for his own happiness.

Even in respect of moral perfection, though we must not willingly be guilty of even the smallest deviation from the strictest path of duty ; yet if we raise our belief or expectation to perfection of character, either in ourselves or others, it must lead, on the one hand, to

idolatry or self-righteousness,—the deepest possible of all forms of blindness,—or, on the other, to misery and disappointment.

12. ASSIMILATION. NIDUS.

AN observation of the greatness of effects produced from small beginnings, and a knowledge of the power of small and apparently trivial causes, operating upon the subjects of their action in their nascent and incipient state, to produce effects of the greatest magnitude, is necessary towards entertaining a just view of nature, and to the pursuit and exercise of a right judgment and conduct.

The principle of a nidus or nucleus, and of assimilation, is well known in the sciences and arts. A little yeast or leaven is first applied, when a stock of yeast or leaven is to be made. A little moisture collects moisture ; a little acid forms more acid ; a little putrescence, extensive putrefaction. The first nucleus is the chief requisite in the formation of the crystal, gem, or other aggregate. The single spark of light or life is sufficient to kindle or rekindle quickly the entire flame.

The effect of fancy and imagination upon the foetus is abundantly well known : being sufficient almost to change even the specific character of the individual. A coloured thread inserted into a tulip-root, is said to be sufficient permanently to inoculate the flowers which it produces with the particular colour.

It is the same with our nascent thoughts and impulses ; which must be governed and directed there-

fore while in their very first bud. The seeds, too, of character and of indelible principles, are frequently sown in infancy and childhood by the most trivial circumstances.

The birth and infancy of nations and empires exhibit the same phenomenon ; the seeds of whose character and future greatness have generally been sown by the character and principles of their first founders.

Consistent, also, with this principle has been the fall of man : the universal corruption by the one sin of Adam. The greatest and highest truths, in like manner, and Christianity in particular, have ever had their origin and growth, as it were, from a grain of mustard-seed.

13. QUALIFICATION.

THE form of truth in general, and of moral truth in particular, should always be in obedience to another law, which requires, that all its principles and conclusions should be stated with careful and especial qualification, according to the subject matter :—such as, “For the most part :” “It is probable :” “*Cæteris paribus* :” &c.

This arises out of the multiplicity and complexity of nature. For since she operates by so many and such secret instruments, in any one subject, that we are incapable of estimating them all with certainty, the truth or principle which is discovered and expressed, having respect for the most part to one only, or to a few of them, requires in the correct statement of it, these forms and additions.

We cannot say with truth, for instance, speaking of national character, more than that the French are, "for the most part," volatile, and more amiable than the English: that the English are, "for the most part," more unsocial and reflective than other nations. We cannot say more than that physiologists, anatomists, and metaphysicians, are, "for the most part," more inclined to scepticism than unscientific men: that our detractor judges our motives to be interested and mercenary, "most probably" from being conscious of such motives in himself.

In very simple cases, indeed, such as the motions of the heavenly bodies, where every agent that operates with appreciable effect may be known and estimated, we may conclude with almost absolute certainty and precision. But even here also a certain condition and qualification must necessarily enter, namely, "supposing that we have discovered the whole law, and the real system of the universe,"—and that the present theory shall not be hereafter superseded by a more perfect one, as was the old system by the Copernican.

In all other cases, where different causes may operate, as in the production of the present features of the terrestrial globe,—a "probability" only, in such case, is the utmost that can be raised in favour of the existing theories of the geologist, from comparing present processes and appearances with the evidences of former changes and revolutions in the surface of the earth. And if there is any truth or soundness in phrenological conclusions, the proper form of them can amount only to this,—that "*cæteris paribus*," and supposing no other conflicting causes and circumstances to exist, a large

forehead is, "for the most part," accompanied with talent, and a low one with the want of it.

To the formation of the character and talent of each individual contribute the multiplied conditions of natural talent, in all its degrees and variety: natural constitution, habit of body, and temperament: health: nursing: food: education; and all the many and various chances and circumstances which, contradictory to or confirmatory of all these, may conspire to give first and most indelible impressions, tastes, and dispositions. Any *one* of these may, "*cæteris paribus*," be sufficient to give the advantage and pre-eminence to the subject of it.

14. CYCLES. COURSES.

WHETHER nature is, or is not, disposed to run in courses and cycles, and to what degree of exactness she is so in each of her several operations, is a matter upon which every person will exercise his own experience and determination; and, according to the general conclusions which he shall arrive at, will be the expectations which he will form in particular cases. It is a very general belief with regard to weather, that there are cycles of three years or seven years, or of both together, in its general character; and that three wet years and three dry years generally come together; a hard winter at the end of every seven years, &c. So also seven years of famine and seven good corn seasons have been observed very frequently to succeed each other; and other such phenomena at similar intervals. In the human body, the constitution is said to

be disposed to make a turn or change at the end of every seven years of our life.

In such subjects as the weather and the fruitfulness of seasons, this law would seem to derive some probability from the existence of cycles in the motions of the heavenly bodies; though the above instances do not correspond with any of the admeasured cycles of the moon and planets. If such a law does exist, it must depend upon causes not yet fully investigated; and is probably independent of the celestial motions; since it does not affect the different quarters of the globe in the same manner simultaneously.

Some persons even suppose that events run in cycles; according to the proverb, that misfortunes never come alone, and other similar ones. And others apply this doctrine to chances, and talk of a run of luck. Accordingly, many persons constantly bet upon the card which has been the oftenest turned up; while others pursuing an opposite course, upon the same principle, always bet against the greatest winner.

15. THE SCALE OF NATURE.

IN the ascent of nature from her lowest and simplest proceedings to her highest and most complicated works, the law of her operation is, in each successive step, to use all the means and instruments with which she before worked in the lower stages of the scale,—and something more:—according to a law, by which she never performs the same thing exactly by two different means; nor things different in their nature by

the same instrument. So great is her power ; so great also is her simplicity !

The celestial bodies have their motions and mutual influences, so far as we know, through the operation of gravity alone. In the chemical combinations of inanimate matter, the force of gravity is still preserved and operates ; but a new principle of chemical election and affinity is brought into exercise, which gives the distinctive feature to this new class of operations. In the vegetable kingdom another agent is introduced, without either of the former losing its use and efficiency. The principle of life, again, in the animal creation, at once contradicts and controls, and uses for its purposes all the former instruments, and makes them subservient to its own much nobler powers and operations. And lastly, the moral principle rises superior to, and co-operates with all these, to perfect the highest rank in the scale of nature, of which we have general knowledge and experience.

Whether any higher orders of beings exist, intermediate between mankind and divinity, which make use of some, or of all the principles which operate in the lower grades of creation, controlled however by the superior principle and essence of their spiritual nature, is beyond our discovery. But analogy, and perhaps other reasons also, would lead us to the conjecture that this, in some way or other, may be the case. Let us now trace this principle into subjects of a higher order than the foregoing, but which are nevertheless within our experience.

In the moral government of the world, also, we recognise this law in the dealings of Providence. When

miracles are to be performed, the agency of known causes are made to co-operate so far as their power can extend. As in the east wind which divided the Red Sea, and which brought the locusts ; the hailstones in the times of Moses and Joshua ; the tree which sweetened the waters of Marah : the ambushes and arts by which Joshua and others performed their miraculous victories. Even Elijah was prepared by an additional supply of food before performing his miraculous fast of forty days. But in all these, the utter inadequacy of the apparent means and causes, arrogates to the several occasions the extraordinary and supernatural agency which was the principal instrument in them. In dreams also,—Nebuchadnezzar was thinking of what should come to pass hereafter, when the prophetic image presented itself to his sight. In visions in like manner,—Daniel was praying for the deliverance of his people, when he received the vision of the seventy weeks. It is an ordinary operation that dreams and apparitions have relation to the subjects which have principally occupied the attention in the preceding moments. But who then ought boldly to ridicule the belief in supernatural appearances, merely because they have been seen by persons of lively or heated imaginations, and upon subjects which were the most interesting to them ?

Again, when spiritual assistance is given for our support and guidance, it is not made to supersede, but to combine and co-operate with, and to give life and animation to, the full exercise of our own natural powers, wisdom, and exertions.

So admirable is nature : so beautiful in her analo-

gies : so harmonious, and yet so perfect and distinct in all her parts and arrangements :—that though one truth may be suggested by another from analogy, yet the truths themselves are independent, and require no support one from another ; and at the same time, when all her principles are distinctly and separately interpreted, they exhibit a wonderful harmony and order, and simplicity and uniformity, which commands wonder and facilitates comprehension.

16. BALANCE OF GOOD AND EVIL.

THIS is one of the most general and observable laws in the moral constitution of nature. All classes and orders and conditions of men are capable, so far as their situation is concerned, of nearly equal degrees of happiness as compared with their miseries. Even the brute creation, as a whole, compared with the human race, and the several ranks and orders of it, as compared with one another, have their general liabilities to pleasure and pain preserved in the same just balance.

But our chief concern is with human nature. In comparing the light-hearted poverty of the working classes, with the anxieties and pampered sensibilities of the most wealthy, it would be very difficult truly to assign the preference. And if the intermediate classes and stages seem to have the advantage of either, it is probably only their superior self-imposed moral condition, which prevents the regularly ascending scale of opportunities of pleasure, and liabilities to misery, from being constantly preserved in the same balance. The

balance is altogether on the side of good ; but virtue and vice have in general the power of giving the preponderance to the one or the other scale.

The preference between a married and an unmarried life is as difficult to be determined. The former raises man into a higher scale of being, into a new sphere of pleasures and duties. But these, as a general rule, preserve nearly the same balance and relation to each other, as those do which follow upon the single state. Even with regard to children, among those who are married, the pleasures and pains which they bring with them are nearly balanced ; and again, many of those who have them think that the married life is the greatest possible blessing, if they could but be without the trouble of children,—and those who have no children are miserable from the eager desire of having them.

Menial servants are the most pampered and comfortable of any in their habits and circumstances ; and in consequence, they are the most unsettled and discontented of all the lower classes of people. In the cancerous wards in the hospitals a heavenly content and cheerfulness generally prevails, where despair only, and horror and recklessness must have reigned, but for the divine interposition of this compensating principle.

Of forms of government, the despotic is the most perfect and permanent in its construction ; and it is the best also when properly employed and exercised : the worst when abused to tyrannical purposes. A free government is imperfect and changeable in its very nature ; and being neither liable to the abuse nor

capable of the advantages of despotism, is under the constant experience of minor evils, and the enjoyment of minor and multifarious advantages.

Lastly, experience of pain occasions a greater sensibility to pleasure; and the overcoming of strong natural passions and evil propensities, produces a higher tone and standard of moral character, than it would seem the man of a naturally good disposition is capable of attaining; who neither has the same danger and chance of falling, nor the same opportunity of rising to the highest level. Socrates confessed to his having been endowed originally with the worst natural dispositions; which he used, as he did his wife Xantippe, for a useful whetstone whereon to sharpen and confirm his patience and power of self-conquest.

17. GOOD OUT OF EVIL.

THIS is one of the most admirable and most important of the moral laws of nature; and it is essentially distinguished from the foregoing principle, though it is closely connected with it.

The Providence of God turns everything to good purposes. His great designs and system seem, to our imperfect view at least, to be as much advanced and forwarded by the evil which is intended, as by the good that is performed. War and ambition and avarice, have been chief instruments in peopling and civilising the world. Avarice, which directed men's studies to alchemy, to the search after a panacea, and the philosopher's stone, led through them to the knowledge of practical chemistry. The vanity of speculation and theory, in

geology for instance, has spurred us on to the attainment of a practical acquaintance with the strata of the earth, the positions of soils, and springs, and minerals. Craniology, itself the most impracticable of all the sciences, has led to an improved knowledge of the anatomy of the brain, and in some degree of the powers and affections of human nature. As many good measures and improvements have been devised and set on foot from the desire of popular applause and self-aggrandisement, as from all other better motives and virtuous inducements. In short, the bad passions are in general most active, and afford the strongest incitements to exertion ;—and perhaps the remark was not an unfounded and injudicious one, That more good has been done in the world by the bad passions than by the good ones.

No doubt much more good would be done, and much greater happiness occasioned, if virtue and religion were more universal and influential. But this is a subject beyond our experience. Our business is with things as they now are. And as the world is into which we were born, and as it is at present constituted, and without regard to the comparative effects of good and bad motives, this at least seems to be a law which we are warranted in deducing,—That good does, for the most part, eventually arise out of evils ; and that there are many great and good effects and advantages, which would not have been so rapidly and effectually brought about, so far as we are capable of penetrating, but for such instruments.

To ourselves this is a law of the greatest possible consequence. We become great and good by resisting

temptations, and conquering our evil tempers and propensities. If therefore we had no bad passions, we could never be virtuous: without evil there would be no good; and our opportunity of attaining to greatness of character, is in proportion to the difficulties which we have occasion to surmount, and to our liability to evil. This is the case also with regard to external evils; to troubles and misfortunes. Riches and prosperity have no power or tendency to make any man wiser or better; and it is chiefly through pains and trials, and disappointments, that we are led onward to that humility, and faith, and fortitude, to that benevolence, simplicity, and disinterestedness, which together constitute the highest pattern and tone of virtue and of religious character.

Out of this arises a lofty consideration:—Since the enjoyment of health is heightened by occasional disease, that of wealth from the experience of difficulties, and in general happiness is much increased by previous misfortunes: since virtue has its growth in the existence of the evil passions, and perfection of character is only attainable through great trials, temptations, and chastenings: since brutes, which are mostly born with instincts more sufficient than those of men, are incapable of improvement, while human reason, which is originally weak, is capable of a high perfection: since in short, the exaltation is in general correspondent to the actual or possible degradation:—

Whether sin and the grave be not in reality a blessing; and whether, but for the fall of man, and his liability to death and punishment, we should ever have

had the promise and capability of the exalted glory and happiness of eternal life.

Our Saviour Jesus Christ's humiliation and sufferings, and consequent and corresponding glorification, are the great pattern and exemplar, and effectual realisation of this law and principle.

18. THE PHOENIX.

THE principle of the phoenix also is connected with the two preceding principles. It enters into all the kingdoms of nature, and runs through her greatest and most important changes.

The seed corrupts, dies, and is quickened. The chrysalis, which is the seeming death of the caterpillar, revives to the volatile and gaudy life and plumage of the butterfly. The morning dawns more bright and brilliant from the shades of night: the summer from winter: man himself rises refreshed and reanimated from sleep, which is as death. So virtue rises greater out of evils and temptations: happiness from misfortunes: glory and exaltation from humility and depression: life and immortality from death and the grave.

In the chart also of history, the book of man and of nations, this principle constitutes a most important feature. The extinction of empires, with their science and greatness, has ever been the womb from which new and improved principles, and brighter beams of knowledge have sprung. The dark ages of the world were the travail of its birth to an immortality of knowledge and light; no less than its end and extinction by the flood was the baptism of its regeneration to a wiser, a

happier, and a less impious race. And if there be any just grounds and foundation for the theories of the geologist, the earth itself has been, now is, and still may be subject to the successive occupation and dominion of different orders of beings, each rising gradually above the other to a higher rank and nobler purposes, out of the many successive destructions, deaths, and resurrections of the terrestrial globe.

Finally, this world shall at its last extinction be proved and purified by fire, and rise again, with its most refined and noblest parts and principles,—the true phoenix,—from the flames, at its own resurrection, purer and more incorruptible than the garment of asbestos, whiter than snow.

THESE are a few of the most striking laws and generally prevailing principles in nature; and they may afford an illustration of the process which must be carried on by the mind, in preparing itself to judge and reason properly, in all subjects requiring determination. These and such like general inductions, formed and treasured up in the memory from observation and experience, are the tests and touchstones by means of which we exercise our opinion and decision in each particular case; and correcting, qualifying, and confirming one another, they together form and constitute that necessary habit and balance of the mind,—which is the judgment.

But as we have already observed, by far the greater part, and perhaps the most important also, of these inductions in a practical point of view, are not capable of being distinguished and enumerated as in the above

examples. Such are many of those by which we are persuaded, on the first view, that craniology, (at least in the definite and mechanical form which it assumes,) is repugnant to the laws and analogies of nature; by which a lawyer decides at the first moment on a case, whether the point is good and tenable; and a skilful mechanist, whether a new invention will succeed,—without entering into the details and minutiae of the subject, or determining particularly the rules which bear upon it.

Also, the above ought only to be viewed and considered as, what they alone profess to be, a few isolated and very imperfect examples of what might be done even in that department which is within the province of enumeration and description. But these perhaps may be found sufficient to point out, and to illustrate what it is requisite that each aspirant after wisdom should do more perfectly for himself, in inquiring after, and storing up general principles, as the constituents of a system of logic,—first, a general one, applicable to all subjects, and that which is equally necessary to all persons, the general business and conduct of life; and next a particular system for each branch of knowledge, science, or business, especially that one to which each person intends expressly and peculiarly to confine and dedicate himself.

Thus there is a particular logic and collection of principles applicable in medicine, which are the laws of vital action in the human constitution: among which are those of sympathy, reciprocity, assimilation, habit, idiosyncrasy, reaction, intermission, crisis.* There is

* Sir Gilbert Blane, in his "Medical Logic," appears to have conceived a view of logic somewhat similar to my own. The

another for the politician :—the chief of which are, first, the principles of the particular government and constitution, which is to be kept in action, and of other forms of government ; next, the laws and operations of the political passions, and the general desires and workings of the public mind.

The logic of the moral philosopher, is a knowledge of the laws and principles of human nature ; of which proverbs and fables afford in general the most abundant collections, and some of the most useful instances.

The farmer likewise has his peculiar and experimental knowledge of the laws of vegetable nature, by means of which he judges, as it were by intuition, or *guesses* at the causes of failure, the best means of remedy, and the probabilities of success.

The same thing is necessary to success in trade and commerce ; and in every particular branch and business of mercantile operations.

In architecture also there is a logic : which consists, not in rules of measurement, and a catalogue of parts and numbers and proportions, but in a knowledge of the essential principles by which form and colour and proportion are governed, derived from the laws of vision and of the human mind, and variable therefore in their application to each particular purpose, situation, and circumstance.

subjects which he treats of under this title are not all the same as those which I have enumerated ; but they are equally illustrative of the principle, and important. The following are among his principal topics. “The generative principle, the conservative, the temperative, the assimilative, the formative, the restorative, the appetitive, the sympathetic. Also the motive, the sensitive, and the imitative principles.”

The Prejudices are an important and peculiar branch of the logic of human nature; and on account of the prominent part which they perform in the process of reasoning, it is requisite that they should obtain a separate and more extensive treatment. It is required that their different powers and tendencies should be known and estimated; and being duly appreciated, that they should be continually kept in mind, and their probable effect and influence sufficiently allowed for in all the decisions of reason and judgment. This practice of allowing for their effects, and of preventing the operation of bias and inclination, amounts in the end to the stifling and correcting of them.

It was originally proposed to extend this collection of laws and principles, to a wider range of subjects, and to have detailed some of the more prominent of the laws of human nature, and of those also of religion and revelation. But the present sketch has run to a considerable length. And it is hoped that enough has been already done, by means of the above collection, to serve the purpose of example and illustration, which is all that was thought desirable. The other topics would lead us into very great length, and might distract the mind from the main object, which is the truth and principle. They might necessarily involve also somewhat too much of particular opinion. Therefore, although they are matters of chief interest to all classes of persons, and are the principal and most universal subjects of logic and judgment, yet it is thought proper to defer them to another opportunity.

At present we proceed to the collection and arrangement of the classes of prejudices.

BOOK II.

PART III. THE PREJUDICES.

Ex nimia altercatione Veritas amittitur.

The habit of opposing ourselves to the same person continually, whether upon all topics generally, or upon one particular subject or argument, is apt to give us a contempt for that person's judgment, and this whether his general sense and judgment be really good or indifferent; and though he differ from ourselves in opinion materially perhaps in only one particular. On the other hand the habit, nay even the mere circumstance of supporting any particular opinion, the more strongly confirms us in it ourselves; and the moment we have undertaken to advocate a cause, even unwillingly, and contrary to our present knowledge and conviction, we are upon the very threshold of believing the goodness of it.

So then whenever our passions are embarked in any subject, there is every probability of our judgment going wrong; or what must amount to nearly the same thing in effect, there can be no certainty of even our correct judgments, that they are impartial. It is essential therefore before all things, that we should fortify our minds against passions and feelings, if we would preserve our judgments free from the effect of prejudice: that is, all selfish passions.

It is not all the passions, however, which are equally effectual in warping the mind and judgment; for there

are some persons who, being patterns of self-denial, are nevertheless most deficient in the art of judging rightly; and spiritual pride, and its attendant wrong-headedness, are frequently found among the exemplary in moral conduct. But the passions which principally influence the judgment may be called more peculiarly the mental passions. Such are those which will be found noticed in the following classes of the prejudices.

Neither is every error and prejudice whatsoever to be attributed to the evil passions; for we cannot but judge and act through prejudice in many subjects, and upon many occasions, by the necessity of our nature. It has been not ill observed, that "until men think for themselves, the whole is prejudice, and not opinion;" and certainly whatever opinion is taken up upon shallow, false, or insufficient grounds, is, though right, a prejudice. And the occasions and instances are innumerable, even on the most important subjects, in which we are compelled to determine and to act upon no better grounds. But the error in such cases is, not in so acting or determining, but in esteeming it to be sound and certain truth, without examination and upon such slender foundation. And it is our business and duty to examine such subjects, according to their importance and our opportunity, when we are able, and to decide for ourselves according to our best means of judging, before placing them in the rank of knowledge and truth. The neglect to examine, when the opportunity shall have arisen, must be conceit or idleness; and the maintenance of a false opinion after due examination, must proceed from the influence of one or more of the prejudices which are hereafter enumerated.

Neither is it pretended, nor can it be expected, that every person should be able, by conquering his passions, and learning duly to estimate and to avoid all these prejudices, to render his judgment and apprehension perfect. Even if this were the sufficient means and instrument, no person would be able to use it to this extent: since no one could entirely eradicate his selfish passions; and the most difficult of any to eradicate are those which exercise the strongest influence in promoting error and prejudice. But independently of this, we are by birth and nature unequal in point of judgment; and must still continue so, after every possible effort has been made in the way of correction and education. Judgment, as much as any other talent whatever, is a gift of nature; and, as well as all other natural endowments, is given in the first instance in various degrees and qualities. Like all other natural gifts also, it can only be in various degrees assisted and improved by education and practice; but it never can be perfected. Above all things it is necessary that this point should always be kept in mind, and that no one should ever believe that his own or any other person's judgment approaches to perfection;—for of all prejudices whatsoever, no one is more likely to create a fallible and erroneous judgment, than the belief or hope that we may be gifted with an infallible one. “Seest thou a man wise in his own conceit: there is more hope of a fool than of him.”

The means of improvement therefore which are presented in this treatise, though they may be the best, are insufficient to secure to those who shall think them worth experiment, an infallible judgment. So it is with

instruments which give assistance to the natural eye: such as spectacles and telescopes; neither of which can make the vision perfect, so that nothing shall be left undiscovered. So it is also with the principles of music and painting; the most perfect knowledge of which cannot make a first-rate musician or painter, without a previous natural taste and superiority of genius. But a glass exactly adapted to a short-sighted eye will often enable the wearer to see more perfectly than a less imperfect sight when wholly unassisted. It is the same with most other instruments of improvement, and with pains and study in general, which in almost every art and subject are found to triumph over uncultivated genius.

Now there are very few eyes indeed which are not in some degree imperfect; and in the natural judgment and apprehension there is the same general imperfection. It is to be expected therefore that a due study and application of logic, which is the proper instrument of the mind in these particulars, should be sufficient to give the advantage to those who use it, over those who reject all study and assistance.

In the following classes of prejudices, distinctness and accuracy must not be looked for in the division and arrangement. One prejudice is in general so closely linked and interwoven with others, that scarcely any error of opinion can be entertained without more prejudices than one being concerned in the maintenance of it. An ill-conditioned mind will be under subjection to nearly all the prejudices; and most striking examples of misjudgment would easily furnish illustration of several different classes of them. A desultory discussion then might easily be carried on, in the course

of which all the prejudices might be illustrated and linked together, and shown to have a mutual relation to one another, as under a single head. Or particular errors might be separately and successively analysed into all their several contributory causes and prejudices. Such a plan of treatment might agree more exactly, and tally with the complexion of reality and truth. But it would be more tedious, and less instructive, and still less well fitted for use and application, than an arrangement under separate heads and classes, such as are more or less obvious, and agreeable to present acceptance, and better fitted to render the subject palatable and easy of recollection. Such is the course therefore which is here adopted.

1. PREJUDICE κατ' ἐξοχην :—PREPOSSESSION.

PREPOSSESSION, which is only another word for prejudice, is the entertaining of an opinion before examination, or upon insufficient inquiry, or for reasons which have been forgotten. This is not properly a division or class among the prejudices; but it may proceed, if erroneous, from any of the prejudices hereafter mentioned; and the proper correction will be according to the class which it happens to fall under. At this first step, and in this general point of view, it is only necessary to know and acknowledge that such an opinion is a prejudice, that it rests upon insufficient foundation, and requires further steps to confirm, or correct it; and to be aware of the power and operation of prepossession in general.

Now the natural and sure tendency of every prepossession is to assimilate everything to itself. It is as it were a nidus, about which every surrounding particle and atom which is of the same nature forms itself, after the same pattern and structure, and to the exclusion of all matters which are of an opposite character. The particular idea or prepossession which first takes root has the likelihood of increasing, securely and constantly, to the overgrowing and stifling of every idea or sentiment which afterwards presents itself.

This is the natural force and tendency of all preconceived opinions; and it is necessary, first of all, to estimate fully the effect of this partiality upon all our thoughts and notions, independently of the particular origin of the error or opinion.

It is impossible, as was before observed, but that in many matters we should be governed by prepossession. We must perform religious exercises, and those exercises according to the requisitions of a particular creed, before we are able to examine the foundations of it. We must in like manner adopt habits of moral and social conduct, before we have had opportunities of choice and comparison. We *require* a compass by which to direct our course and labours in the first instance. Without this the first advances can hardly be made, and the mind might be for ever wandering without settled principle. Religion is generally the compass which first gives a direction to the mind, and afterwards governs it in all its efforts and excursions; for religion, where it exists, is supreme in all men's minds and motives; and each religion and religious persuasion has generally some peculiar and specific

character of thought and judgment which is essentially associated with it. Thus the Roman faith has in general a greater agreement and sympathy with credulity : Protestantism a stronger tendency towards doubt and scepticism : the tenets of some dissenters towards democracy. The Mohammedan doctrines necessarily form the mind for a ready obedience to despotic government.

Now this state of prepossession is, in its most general form and operation, the law of the mind, which has been repeatedly noticed, and respecting the correction of which and its emancipation from the cradle in which it was at first confined and nurtured, some remarks have already been made ; and some will be added. But after it has emancipated itself, and has learned to depend upon some more solid foundation of inquiry and knowledge, the general error is that it is apt still to rest itself upon too narrow a foundation, and to affect a confidence and security greater than the strength and structure of the fabric in any degree warrant. Each person reads, and guides and forms himself by his own book of truth, and that gallery of nature which he chooses to acquaint himself with. The narrow-minded man is frequently what is called "a man of one book." Many people read nature and life in novels and dramas : religion in books of controversy : history in authors who have written only to support particular opinions. The sceptic reads religion in the book of nature, which in fact is his own mind ; and his idol is himself.

According to each person's natural disposition and talent, and according to the sources from which he has derived his observations, one man is generally desirous to maintain institutions and practices as they already

are ; another man's mind is wholly directed to improvement and change. The one, having studied more deeply, and become more fully acquainted with the uses and relations of things, conceives a reverence for that which is framed so ingeniously and works so sufficiently, and sees nothing but the destruction of an elaborate and complicated system in the alteration of a single part. This is the prejudice of knowledge. The other observes only the defects of the result, and knows little of the construction or operation ; and zealously and philanthropically thinks only of setting up a perfect instrument, and of destroying the old one. This is a prejudice of ignorance.

No opinion can properly be accounted other than a prepossession and prejudice, which is not founded upon a basis of inquiry and examination as broad and solid as is suited to the particular subject and occasion.

2. Every one has also his peculiar prepossessions upon particular subjects. And these also have the same faculty of corroborating and confirming themselves upon all occasions, and by all fresh circumstances. There is no hope of deposing a geologist from his favourite theory, or a craniologist from his confidence in a particular conformation ; for he sees only the cases which corroborate his opinion, and is blind to the remainder : in the same way as the votary of Neptune found in his temple the votive tablets of those only who had escaped from shipwreck.

Upon this topic it is particularly to be observed and guarded against, that almost all personal argument and controversy is sure to confirm each party more strongly

in his first opinion. When altercation arises, truth is lost sight of; and the zeal for victory engrosses and sharpens the ingenuity of each of the parties to the discovery of fresh weapons, which he is more employed in using than he is in estimating the opposing ones. But independently of the event of the controversy itself, this is the natural consequence; that in fighting its battle over again afterwards within itself, the mind is sure to furnish itself with some additional arguments. These there is no longer any opportunity of refuting. The mind then exults and triumphs in its self-attributed victory; and each party remains more strongly confirmed in his original opinion.

2. EDUCATION.

It has almost become a proverb, to say,—He has told it so often that he believes it himself.

If we can practise such a deception upon ourselves, how much greater must be the effect of another person constantly instilling into our minds one particular opinion or precept. Burke has said of newspapers,—“Let us only suffer any person to tell us his own story, morning and evening, for twelve months together, and he will become our master.”

Now this is the process of education: only that the power of education is infinitely more effective; inasmuch as it commences its operation before the mind is capable of opposition, or has any *point d'appui* or fulcrum, upon which to rest its instrument of resistance. The consequence is, that education must of necessity

give to us the first law of our mind, and also our particular judgment and opinions upon generally important subjects. And these laws and opinions must generally be pretty firmly rooted and established, by the time that we have the power and opportunity of thinking for ourselves.

Since it is justly said then, that till we think for ourselves, all is prepossession and prejudice : and since every prepossession strives with advantage to confirm and strengthen itself : how, it must be asked, has any one the opportunity of getting free from the prejudices of education, and of so remodelling and re-establishing his opinions that they shall stand only through their own just and proper balance, and upon an even and settled foundation ?

Few it must be acknowledged ever do get thoroughly free from the fetters of education, or fail to carry their first acquired notions on with them to the latest stage of their existence. But nevertheless all have the opportunity, if they are prompt to avail themselves of it. There is a crisis in every person's life and history, more or less sudden, at about the season of manhood, when the understanding is beginning to arrive at conscious strength and maturity,—in which a man, by the necessary law of his nature, more or less emancipates himself from the trammels and fetters of education, and forms his own mind. Each person ought to lay hold of this opportunity firmly and resolutely, yet wisely and cautiously ; and conscious of the importance and interest of the occasion,—not sweepingly imagining all his present opinions to be wrong because they are prejudices, nor that they are right

and proper because he has hitherto acted upon them,—to set himself with freedom and diligence, to inquire into the real foundation of things, and to forbear in future upon all occasions, a greater assurance and certainty than the extent of inquiry actually warrants. This plan should be undertaken and resolutely followed up by the mind, while at the same time summoning to its aid, and studying to perfect, its whole moral principle; and labouring to divest itself of all those eager passions and disturbing motives, which may give rise to error and prejudices.

2. There are national prejudices of education, and there are family prejudices.

Each nation has in general its own peculiar code of morality, and is honest and virtuous in its own way. Among the English, falsehood is reckoned among the gravest and most heinous of all possible charges; among the French, it is a matter far less shocking, perhaps sometimes it is a boast, particularly if the talent and cleverness by which the deception was effected, or the greatness of the attainment, present a sufficient counterclaim for admiration. In most countries, it is thought fair to take in foreigners. In England, which is in general the strictest of all nations in its dealings, it is a matter of course to overreach in horse-dealing; and it was but lately not scrupled to use smuggled goods, and to escape paying lawful taxes. In very large schools also, there prevails in general a sort of Spartan laxity of principle in certain particulars; as in respect to books, knives, and other common play-things. The opinion of each nation in favour of its own superiority, and of the superiority of its own

religion, character, and form of government, must be ranked together, with these examples ; which, as it is entertained equally by all nations, must be a prejudice.

3. Family prejudices are of the same kind nearly ; as each family has its peculiar customs, virtues, and failings, and general mode of thinking.

Some families, which are otherwise religiously strict, are regardless of the duty of brotherly affection ; others are habitual slanderers. Some which are careful of every other duty, are forgetful of truth, and become practised and habitual exaggerators. Family education prescribes to each person originally his sect and party, and other opinions which are not less influential in appointing to every one his course and objects in life.

These reflections should teach us forbearance towards others ; a mistrust too of ourselves ; a disposition also to respect and appreciate the sentiments of other people, as having probably the same, or an equal foundation with many of our own opinions. This is a first and chief requisite towards judging correctly of others, and strengthening and correcting our own judgment. The ears of a Unitarian may be as devoutly shocked by hearing the worship which is paid to "Jesus Christ," as those of a Protestant by the veneration of the Virgin Mary. In both these cases, it is well to consider that there are some reasons for the opinions which we disapprove ; and our own judgment will rest upon a more proper and solid foundation, while our self-conceit and self-confidence may be diminished, by informing ourselves diligently of the nature of these reasons.

A diffidence of ourselves, founded upon a knowledge of the real grounds of our opinions, and a deference for others, arising out of a persuasion that they also may have equally sufficient reasons for their peculiar sentiments, is the most requisite step towards correcting the prejudices implanted by education.

3. PROFESSION :—HABIT :—FASHION.

THE pursuit of every different kind of study, profession, or occupation, has a tendency to establish a particular law or habit of mind, such as is peculiarly conducive to the successful practice of it; and this habit of mind operates as a prejudice, in giving its own character and colouring to truth, and to the complexion of nature. Each person sees the world, therefore, through a partially distorting medium, and compares it with a more or less artificial standard; the effect of which is, that either he impresses upon every object in it this peculiar feature and complexion of his own mind, or else he disapproves it because it does not correspond exactly with his approved pattern and model. He can see and estimate things only in one single point of view, and with reference to one idea and object. Thus the carpenter wants to build the wall of wood, the currier of leather. The mechanist talks of the stomach as a mill: the brewer as of a vat: the cook as of a stewpan:—whereas, as observed by Doctor Hunter, it is neither a mill, a stewpan, nor a vat, but a stomach. For the same reason the lawyer, being principally versed in established rules and precedents, is devoted to

old institutions and practices, and is in general adverse to improvement. Through similar prejudices, Aristotle analyses matter logically into the *Πρώτη ὕλη* : Kant makes a sort of mathematical division and arrangement of the mind ; and craniologists suppose that the various faculties and affections are disposed in definite parts of the brain mechanically. Physicians, being chiefly conversant with disease, know little in general of the science of health ; and politicians, the physicians of the state, because it does not fall within their immediate craft and province, do not perceive that the moral character of the people is the real source of a nation's strength and wealth.

Now it is on account of this bias and peculiar disposition being produced by devoting ourselves to a particular profession, that the necessity arises for a particular body of persons expressly devoted to the profession and study of religion. All the other studies and sciences, all worldly objects and pursuits in short, in some measure unfit us for that one. The anatomist, the geologist, the mathematician, the chemist, the lawyer, the politician, even the moral philosopher, all have the law of their minds in some degree unfitted, by the peculiar use and exercise to which they habitually abandon them, to form perfectly just and correct estimates upon the topics of religion. And it is necessary for real excellence and success in each calling and profession, that the mind should more or less be so abandoned, and that the peculiar law and habit of mind which is adapted to it should be acquired. "Jack of all trades," though the cleverest fellow, and the man in general of the most enlarged mind, "never makes

his fortune ;” and this is the case, because he has never laboured or condescended so far to narrow his mind and abilities, as to acquire the confined and exclusive skill and habit which is necessary to the perfection of practice in any one line. But this too great and exclusive devotedness to any objects of temporal concern, and of a material nature, militates against a true comprehension of religion, and furnishes the sources of idolatry ; for there is nothing so peculiar and exclusive, as compared with all worldly and human concerns, as the pure mind and spirit of religion. There is need, therefore, of a religious profession. Not that the religious professor is incapable of sympathising with, or of entering into the motives and feelings of the world’s votaries. On the contrary, the motives and rules which he instills, are to be exercised in the business and intercourse of the world ; and his evidences and analogies are drawn from all the ways and works of life and of creation, and the inward and actual experiences and workings of human nature. The true Christian minister then is a professor of all nature :—he exercises the most enlarged and liberal calling, which alone opens and expands the mind to the justest and most general views of things :—he alone holds the compass which can direct men to the pole-star of truth, through all their dark, and devious, and intricate sublunary wanderings.

The religious profession then must give up their whole time and study to the objects of their calling ; the rest must give a certain portion, a seventh part, of their time and attention to the topics of their instruction, in order to correct the peculiar errors and

prejudices of their own pursuit and study, which are constantly invading them.

2. Knowledge and habitual exercise in any one particular line, give a prejudice and a partial taste in favour of that subject. Thus the professors of German and of Italian music, mutually despise each other's, and both jointly the Scotch and English, and all other styles of music. So it is with every other school and style, and profession and calling, in every other subject whatever, from painting to cookery ; and the principle is so obvious, that there is no need of examples.

What is of much more important consequence, the code of morality and conscience, and the habit of thinking things to be right or wrong, is according to the school which a person has been brought up in,—as it were his profession. People of fashion cannot at all be brought to think, no, not though they listen to it every Sunday from the pulpit, that their absolute worship of the world's opinion militates in any degree against their baptismal covenant. In the same way we think it to be no sin at all, because we habitually—covet. The habitual debauchee cannot believe possibly that his practices are criminal, or forbidden by the commandment, because he has always been in the habit of practising them. We should be diligently warned, that we cannot look long and familiarly upon vice, without our abhorrence of it greatly diminishing : then we excuse and laugh at it : our character goes next : next we love it : it is not one step more to believing it to be no sin, or at least a very pardonable one !

3. This is the operation of fashion. Those new fashions which at first offended the eye, and were ridiculous, we are reconciled to by the general use and approbation of them. Being ashamed to be singular, we very soon approve; and shortly after we prefer them. In the next step, we esteem the last fashion as absurd as we just now thought the new one to be.

This is the course in opinions as well as dress. The penalties against Jews and Romanists have been thought the bulwarks of our security. A minister announces his intention to abolish them. At the first moment we are alarmed and shocked. The matter is generally talked of, till we grow familiar with the topic; and we become less apprehensive. Then the public mind, following the opinion of the leading men, becomes reconciled, — favourable; and presently the measure is carried through with the general consent. It is the same in religious practices. Within the experience of a short life, family prayers and extemporary preaching have ceased to bear the stigma of methodism. Fasting, soon, and self-mortification, may not be deemed a proof of Romanism.

This prejudice may operate to good as well as evil, and so as to correct other prejudices. The good or bad effect must depend upon the good or bad principle of the circle which we look up to.

4. DISPOSITION : — CHARACTER : —
PECULIAR TALENT.

THE natural talent, character, and peculiar disposition, is one cause of prejudice and partial judgment, which is very extensive in its operation, and difficult to conquer. It co-operates with education and habit in its influence, and is often undistinguishable from them in its effects ; but it altogether differs from them in its origin, and greatly so also in its character and features. Great talent is singularly allied to madness ; and unreasoning prejudice occupies an intermediate place between them. There is a general energy of mind and cleverness ; and there are peculiar energies. But great talent is most generally of the latter kind, and exclusive in its objects. This is pregnant with prejudice when in excess ; and the excess of prejudice is one species of madness.

1. An aptness for seeing *resemblances* is one species of talent ; its opposite is a talent for detecting *differences*. The poet and the wit are votaries of the first of these talents ; and neither of them has general fame or credit for philosophic judgment. But the French afford a more remarkable example than others of this habit of mind, and of the errors consequent upon it. Their character in this particular, is well caught and exhibited by Sterne, when he describes them as taking him for Shakspeare's jester. "Vous êtes Yorick, et vous badinez : therefore you must be the king of

Denmark's jester." A similar story is told of them respecting the poet Moore. "You are Monsieur l'Amour, and you write love poetry: therefore you must be Cupid himself."

The opposite propensity for observing differences and distinctions, merges, when in the extreme, into over doubt and refinement, into pertinacity and general oppositeness in opinion and arguments, and at length into habitual disbelief and scepticism.

2. Another natural talent is for *observation*; and its opposite is *reflection*. These also are in general contradictory to one another.

The English are in general addicted to reasoning, and the habit of deep reflection; and this not unfrequently shuts up their minds, and excludes them from subjects which fall more properly within the province of observation. They are fonder of inquiring into the rules and reasons for being happy, than of actually being so; and will reason themselves out of the belief that they are so, unless they can give a good explanation of it. They will often allow themselves to be reasoned out of the belief and evidence of their own senses; as in the theory that absenteeism is not an evil. They study the theory of morals, not the conquest of self. The influence of the moon on lunatics is an exploded doctrine; because it does not yield obedience to science and reasoning. Proverbs are held in low estimation; because they are merely practical observations, mere truth and wisdom!

Observation has also its errors and prejudices, when it is untempered by reflection, and too hastily

depended upon. It is constantly going wrong. Its errors however are not so deeply rooted and incorrigible as those of reflection; and being ready and nimble, it quickly brings itself back again from the devious track. There are some topics which are peculiarly within its own powers and province. Thus, illiterate men are the best judges of the weather; and unreflective men are generally the best observers of countenance and character.

3. There is a disposition for *generalisation*; and a disposition for *detail* and *minuteness*: each of which fits and unfits us for correct judgment in particular spheres and offices.

The errors arising from too great generalisation have already been frequently spoken of. The too great disposition to minuteness must infallibly make a bad artist and a bad critic, and can only fit us for the lowest and most subordinate offices in the business of life.

4. A proneness to *change* and to *improvement*, and an opposite proneness to support *old institutions*, must almost be considered also as natural dispositions and propensities. The former seems to spring, as it were naturally and immediately, from a native activity and ingenuity of mind, which must be busy and creating; the other from a practical disposition and talent, which devotes itself rather to the improvement of the use, than to the construction of the machinery. The former is in general more fit to be intrusted with the detail and subordinate operations of the manufacture, where

changes may not be dangerous, and improvements might be highly beneficial; the latter only is to be intrusted with the great machine itself, which the former would never have the patience to comprehend, nor the steadiness to appreciate. Unfortunately, these offices, in the great affairs of life, are frequently reversed. It requires a union of both these talents, by which the prejudices of each may be counteracted, before great improvements can safely be projected.

5. Talents for *invention*, and for *teaching*, are also of a widely opposite character. The able teacher often has a mind not at all capable of viewing nature in a new light, and of penetrating by new paths of his own, discovering into her mysteries; the acute inventor knows little or nothing of the world and of human nature, and has no sympathy with the minds of those to whom he would communicate his discoveries.

The greatest instructors and benefactors to mankind, did not in general write down their own doctrines; but formed during their lives a small school or sect, through whose means their doctrine was afterwards disseminated. Copernicus did not during his life give his system to the world; John Hunter's opinions were collected and published by his able disciple after his death. The history of most inventions will discover to us that it has not been the original inventor, but the active and persevering and practical propagator, who has obtained the chief celebrity through the invention; and in general also the credit of being the discoverer.

It has been much questioned whether the prince of philosophers, Aristotle, was half so much an inventor, as he was an active, ambitious, indefatigable plagiarist and schoolmaster.

6. As caution is opposed to precipitancy in action, so *judgment* is opposed to *persuasion* and proselyting zeal, in opinions and reasoning.

The extreme effect of judgment is to produce such a spirit of hesitation and doubt and indecision, by reason of innumerable opposing motives and qualifications, that nothing shall appear sufficiently certain to be acted upon.

The other habit is so far removed from estimating opposing circumstances, that the whole mind and endeavour is absorbed in imparting the one principal engrossing idea and impression, which can be so much the more vividly and convincingly impressed, from the want of all qualifying accompaniment and circumstance. Wrongheaded, headstrong, party zeal and opinion, derives from thence its origin and baneful success.

7. There are a few persons whose disposition leads them to look always upon *the best side* of things ; there are many who fail not on all occasions to look upon *the worst side* of everything.

The first, being one of the best correctors of misapprehension and false judgment, can hardly attain to such an extreme as to constitute a prejudice. Our natural spirit of self-preservation generally makes us sufficiently cautious in reposing confidence ; it is most

frequently our supineness and negligence which bring us into any error in this particular.

The other propensity leads us into the same in some measure, but into deeper errors and difficulties than indecision and over-cautiousness.

8. A turn for the *ludicrous*, and a turn also for the *marvellous*, are frequently such as to distort every feature and circumstance of life and nature, that comes under our notice. All the other natural dispositions and tastes, and propensities, which are found in human nature, are equally capable of giving a false and partial, and prejudiced colouring to the facts and events, and phenomena, which severally come within their province and cognisance.

Now most of these natural talents, tastes, and energies, are each of them suited to the pursuits and habits of particular professions, whose objects and requirements they fulfil or further. Is it desirable then, that this correspondence and suitableness, should be sought out and discovered, and the discovery acted upon by making the adaptation?

For the highest practical attainment and perfection of the energy, and success in each particular line, it is necessary that the profession and calling should be suited to the peculiar talent and character. To enlarge the mind and to improve the judgment, the opposite course exactly ought to be pursued; and those lines and occupations should be chosen and followed, which are the least likely to confirm the natural propensities, and have the greatest tendency to correct

and neutralise the peculiar partialities and prejudices.

The art of life is, so to choose and apply the several callings, propensities and characters, so to adapt or oppose them to each other, so to combine and mingle them, that the mind and habit thus formed and perfected, may be the best suited to the object and station of life, speculative or practical.

5. SELF-DECEPTION :—UNTRUTH.

BUT one of the most copious and baneful sources of error, and the most prolific in false opinions and prejudices : the first also in effect of those which lie more peculiarly under our own control, and arise out of a defect of moral principle : is that self-deception which we voluntarily, yet often unconsciously practise upon ourselves through a want of veracity.

We repeat things, as before mentioned, till we believe them to be true.

This is the case, not only in little embellishing circumstances and trifles, but in matters of fact likewise. Just in the same way as we remember to have remembered some actual occurrence, though in reality we have forgotten the occurrence itself, so we remember also that we have frequently related one, forgetting whether at the time we related it for true.

Now, how much easier and more frequent must this operation be, when it is a mere exaggeration ! and which of us does not use it frequently in our ordinary discourse ? Which of us is not often ashamed to

confess his ignorance, and does not pretend to a somewhat greater knowledge and experience than he really has? Who does not quote a general opinion or conclusion from a single author, or from a single fact?

The practice of speaking in hyperbole and with exaggeration, though sanctioned by the general taste and usage of society, is one of the chief means by which we habitually impose on others and upon *ourselves*. We say "always," "never," when we have had experience of the subject only once or twice:—we say "generally," "frequently," upon but a single example:—we say we "know," when we have really no other authority than hearsay:—we say "people say," and "the world says," what we have heard only as a conjecture from but one single person:—we say "we have often read," lest we should betray that we read only yesterday, in what author, and out of what kind of book.

These are at the best a great disingenuousness, if not falsehoods; and they are some of the invisible, and on that account, most mischievous of the methods and instruments, by which we deceive our own minds and fill them with prejudices.

For the first step in error is the one which is essential. When we have once asserted a thing, we are ready to defend it; and the more it is questioned, the more our zeal is roused and exercised to maintain the assertion. The warmth of controversy abstracts the attention from every object but that of victory; and hurries us on from one step to another of exaggeration and mis-statement. We are tempted to use

reasons and arguments which we know to be fallacious, or which at least have never had any operation in persuading ourselves; and in the next moment we ourselves believe their efficacy. There is no temptation like that of a theory or an argument, to tell a falsehood. There is no falsehood which by continual repetition we may not persuade ourselves of. The *habit*, then, of maintaining the same side of a question repeatedly, or for a long time together, must be of still greater effect. How frequently does an advocate sit down convinced by his own arguments fully and entirely, who well knew the point to be directly against him when he first began his speech!

Misquotation is a falsehood of which scarcely any theorist is not guilty; and it is almost unavoidable. The mere circumstance of leaving out the context in a quotation may be a misrepresentation;—how much more then the introduction which has been given to it by the previous course of reasoning. Yet this is the form and manner in which we always quote it to our own minds; no wonder then that we are fully persuaded of, and impressed with the use and meaning which we attribute to the passage, and in the same sense quote it authoritatively to others;—and it is quite impossible to give the whole context, which may be nothing less, in effect, than the whole author.

This prejudice furnishes the leading instance of the operation of the moral character upon judgment and truth. The extent of its influence cannot be conceived or calculated. In the fineness and frailness of the line of truth, and the evanescent minuteness of the seeds of the most gigantic errors, it is impossible for the various

and extended operation of this insidious influence to be duly estimated. There is hardly an impostor who does not equally impose upon himself, through this prejudice. This is not only the case with the enthusiast, who has attained to the habit of exciting himself at will, till he believes himself to be actually inspired ;* but in matters of fact and of ordinary life, in events of private and individual history, the constant practice of asserting a pretension, and of assuming a fictitious character, every day persuades the unprincipled actors of the truth and reality of their own statements, and of the honesty of their own practices. The habit of deception has become a second nature to them. Their fictions are to them realities.

When the effects of this prejudice are duly estimated, it will be plainly seen and confessed, that, The essence of truth is to speak the truth.

We ought not to consider the principle of our minds to be perfect, till we have acquired a habit of giving the real authority which we have for everything, and the exact extent of it: as, that I read "yesterday," in the "newspaper:" I heard casually, in "conversation:" I "once" saw: I have known "two" persons benefited and "one" cured, after taking such a medicine. This form is of the essence of truth and virtue, against which nothing militates strongly but pride, vanity, and the love of self.

There are some persons, however, who have no taste for truth; their dispositions and tendencies are all in the opposite direction. In some the marvellous, in some

* See WHITE'S *Bampton Lectures*, 9. Part I. p. 414.

the amusing, in others the ludicrous, is the predominating influence; let alone the practice and disposition that avarice creates, and the habit of enhancing and bargaining. But there is a *natural* untruth in the human mind, a fondness for disguising the real state of things, and putting on false appearances; whether arising out of an innate principle of caution and self-preservation, or a consciousness of the advantage gained over others by acting upon their ignorance. Where weather-boarding is used in buildings, people colour them red to imitate tiles; when weather-tiling is used, they paint them white to look like boarding. Brick-work is covered over to resemble stone, and stone is not unfrequently painted so as to imitate brick. In the affairs of life, there are many persons, whose first impulse is, when they are asked a question, to convey an impression contrary to the truth. It is a measure of precaution, which has ripened into a habit. If their interest proves to be on the side of the truth, the first answer is easily shown to be erroneous; if on the side of the falsehood, then the useful impression has been created, which it would be much more difficult afterwards to produce. As the conduct of many people in society and in business, is a constant speculation upon the ignorance of others, and a perpetual deception, this habit and character is not unfrequent.

This feline temper and propensity must be utterly eradicated, before we can aspire to walk with success in the narrow path of truth; and an opposite spirit of candour and openness, "a taste for truth," must be engendered, and become the ruling passion and principle of the mind.

It is necessary that one who hopes for truth, should ardently desire it : *—

That he should love it with his whole heart and mind :—

That he should be ready and willing to sacrifice everything for it :—

That, to the end that error may be nipped in the bud, he should never allow himself even to wish an untruth :—

That he should never exaggerate or mis-state anything, in the smallest particular :—

That he should be used to give his real authority, and the exact extent of it :—

That he should never give any but the true reasons for things, by which he is himself persuaded ; or else be silent :—

That he should never wish another person to be wrong, or argue for victory :—

That he should never use ambiguous and unmeaning phrases, in obedience to fashion, and to disguise his meaning, but speak his real sentiments and meaning openly ; or be silent.

All the following and preceding prejudices go hand in hand with this one ; and in most of them it is the want of a strict integrity, and the absence of a thorough zeal for and devotion to truth, which encourages their growth.

6. SELF-LOVE :—EGOTISM.

EVERY person while he is a child, in years or in

* See LOCKE, *Human Understanding*, b. iv. c. 19.

discretion, and until his mind is enlarged by kindness and experience, regards the narrow sphere and circle by which he is surrounded, as the only or the principal one. He is to himself the centre of the universe; and objects and events are regarded by him only as they have relation to himself.

We are all of us more or less children in this respect. The objects which are near to us, the foreground of life, occupy the largest portion of the field of vision, and are the most vivid and distinct in their colouring. Distant events and objects, eclipsed by intervention, obscured and diminished by the effect of perspective, make weaker only and fainter impression upon us, and have comparatively but little influence.

Yet it is the express province and profession of man, and of his rightly improved faculties, to correct these false appearances and impressions; to see all things and events in their true relative position; to be occupied with remote causes and consequences; to bring futurity familiarly within his view;—to prepare for immortality. The great business of religion, and wisdom, of judgment, and logic, is no other than this. To dwell on futurity: to have hope of what is promised: to have faith in that which is distant and unseen, is the business of religion. To sacrifice present for future pleasure: to reject the dictates of the present passion: to lower in the estimate what is sensible and sensual, is the business of wisdom and moral government. To qualify present and engrossing topics and arguments, by a wide and distant field of experiences: to correct the narrow partial views and prejudices derived from education, profession, peculiarity of mind, and talent,

and character,—this is the business of logic and judgment.

But our natural dispositions are opposite to all this; and our narrow-minded egotism magnifies the present topic into supreme importance. The Greeks called Delphi the navel of the earth; other nations have asserted the same prerogative; and a late ingenious author has carefully calculated that England is the exact centre of the civilised world. Again, the present event is always the fulfilment of the prophecy; the present pain or misfortune is always the worst possible; the present temptation is the most irresistible; the present theory or discovery accounts for everything. Dr. Jenner is the whole cause of increase of the poor-rates; the non-use of stereotyping is the cause of all the failures among the booksellers; the late discoveries in electricity clearly prove it to be the universal principle, the *Anima mundi*. A learned doctor, in a late discourse upon the notation of machinery, grew so enamoured of its powers, that he anticipated its adoption into families and offices, and even throughout all the departments of government, so as to give an accurate account of all that was going on and all that was neglected in every branch of it.

2. But as this prejudice, in the instances which have been given, enters into all our motives and movements, and affects our common and everyday observations, so the next branch of it enters into our social intercourse, and becomes the bane of society and conversation. For other prejudices, many of them influence more readily our philosophical opinions; but this is as it were the peculiar prejudice of social life.

Our self-love flatters us that what is our own is also the best: our own knowledge, therefore, our opinions, and taste. It is the same with our country, our sect, our profession. Like the hound and greyhound in the fable, we would indeed add the qualities of others to our own if we were able, but we would not entirely change situations, however much we may be discontented. Since all persons and all countries are of this same way of thinking, and maintain each of them their own pre-eminence, upon their respective grounds, there must be some prejudice upon this subject.

Hence arise many of the commonest topics, nay, the sole topics of some people's conversation. It is a constant judgment passed upon other people, and upon the most indifferent events. It is a continual question whether things are right or wrong. And this is sure to be determined by their own circumstances and practice. There are some who would gravely enter into a discussion whether it is better that noses should be turned to the right or to the left. And it would be sure to be resolved by each person according to his own face. Each one has some particular idol, some narrow criterion, by which he judges of the worth and merits of everything. There is some end or object which he considers to be the proper one; and this of course is his own object.

This is the key to that spirit of criticism, and caviling controversy in minute matters of religious opinion, which infects Christian societies and families with most unchristian sentiments towards each other, in their search after pure Christian doctrine.

Questions of taste are of the same source and

character. They are always founded upon the latent premiss, that our own taste is the right one. Whether in music, or in painting, or in poetry, or in oratory, or in beauty, or in dress, or in morals, or in society, it is one and the same thing, namely, the model that we admire, which is the standard of comparison. Extract this premiss, remove this one veil, and the fallacy is left naked. This may be done by using the simple question, This is your own taste? That is your own opinion? Strange! that when God has beneficently created us with an infinite variety of tastes and temperaments, and has provided an equal and correspondent variety of works in His creation, suited and adapted to them, that man should set himself to work to nullify this beautiful arrangement made for his benefit, and should not perceive that it is a direct impiety to set up one standard and model of taste.

And as tastes must differ, so also must opinions; and it is as unchristian, and ignorant, to require *exact* uniformity in religious sentiments, as uniformity in taste. And it has been well conjectured, that "scarcely any two persons think exactly alike, upon what are called doctrinal points, who think at all. It is only those who have never thought, that appear not to differ."

3. Another form in which this prejudice exhibits itself, is in the general contempt which is felt for foreigners, and the depreciation of other nations. The ancient terms were Gentile and barbarian; which were indiscriminately and often mutually applied to all except their own countrymen. Even the Babylonians and

Egyptians came under the same designation from the Greeks, who had been instructed by them. And the general word foreigner is in little better acceptance with us at the present period.

In the same way we despise all other governments, and chiefly the despotic, as being the most opposite to our own; and we esteem those of other sects and religions as little else than idiots and fanatics.

But strength of counsel, and virtue, and wisdom can reside among Mohammedans, and in despotic courts: as we may daily see if we do not blind ourselves voluntarily; and as we should lamentably discover, if we should attempt to overrun the Chinese empire, which it has been coolly and modestly calculated by a certain writer could easily be done with twenty thousand men.

4. Another egotism which we exhibit is the blindness to our faults, and the prejudice which is created by it in favour of our own cause.

In an argument in proof of the decline of literature, one party enumerated the most eminent writers of all former ages, and compared them with those of the present day: not perceiving the fallacy of his own reasoning. His opponent enumerated the faults of all former writers. The first party quickly detected the fallacy, and exposed it immediately.

Painters are in the practice of looking at their works in a glass, for the sake of seeing them in an opposite position to that in which they have most frequently regarded them. Some such test is desirable and applicable in life. Nathan's parable was a test of

this description. So was the farmer's story to the landlord, that his ox had gored his landlord's cow,—whereas it was the reverse. The proper conduct to be observed towards our inferiors is best learned by considering those who are superior to us. Towards all persons the plan is to reverse the picture; and then we shall see clearly the true position of our own case.

5. Another narrowness of judgment, with regard to merit, arises almost unavoidably from comparing everything and everybody with ourselves; and judging of them accordingly. We consequently esteem most highly those talents in which we ourselves are deficient, and those acquirements which we find it the most difficult to attain. A retired person admires most the talent for conversation; a quick person the power of deep thought and reflection. The orator admires the depth and sagacity of the philosopher; the philosopher desires only the orator's ability to give to his discoveries the empire which they deserve. On the other hand, we disregard those things which we find easy; and writers and artists in consequence pride themselves frequently, not upon their works of greatest merit, but upon those which are the most out of their own proper and usual line, and which have cost them the greatest labour and difficulty.

The effect of this prejudice is remarkable in the estimates which we form in comparing ourselves with ourselves. Whatever we have done beyond ourselves and our own expectations, whatever we have improved much beyond our first effort, we think must be very good, and we pride ourselves upon it. This is found to

be the case in extemporary effusions, as well as in the more laboured works of the pen and of the pencil. It is the same with regard to health and happiness ; we enjoy them, not according to the real measure of them which we possess, but according as they rise above or fall below our own usual and ordinary standard.

There is nothing less than an actual trial and experience in the world, and a practical competition and acquaintance with it, in each particular subject, that can enable us to form a true and ready estimate of ourselves, and of our own productions.

6. Another selfish narrowness of mind is shown, in considering the knowledge which we possess on any subject to be a sufficient foundation for a positive judgment ; and in acting as if all things which we do not know did not exist.

An allowance for matters which have not come to our knowledge, but which must be supposed to exist, founded upon a consciousness of our probable ignorance, and of the insufficiency of our powers and diligence as compared with the nature of the subject before us, ought to be made an essential and important ingredient in every sound judgment. No one man's mind embraces at once all the topics in any complicated subject ; and it requires the studious and professional devotion of a large portion of life, to attain to considerable skill and confidence in any one of the branches of ordinary importance and interest. But even then the imperfection and ignorance is great. Even the philosopher's view of human nature is a partial one ; being founded,

as is observed by Dugald Stuart, chiefly upon a series of experiments upon himself. An allowance therefore must be made for this narrowness of the field of observation: or else the estimate must be false, and the expectation disappointed; or at least the certainty and confidence will be greater than the premisses warrant.

The man who suffers his estimated expenses to equal his income, will be sure to be in difficulty at the year's end. And if we cannot make a perfect estimate even in the simplest of all matters, how can we ever hope to balance the contingencies in the more complicated concerns of life. The proper allowance must always be made, by diminishing the degree of certainty which is felt, according to the occasion.

Yet the certainty and confidence, instead of becoming weaker, is generally found to be greater, in proportion to the confinement of knowledge. The really wise and learned may generally be trusted to make a fair acknowledgment of their ignorance; but from the ignorant this is never to be expected. The ignorant man cannot but be ignorant of his own ignorance. The last thing in the world which they are able to teach the deaf and dumb children is, that they are not very wise and clever, and the rest of the world remarkably stupid.

7. An opposite effect of the same prejudice, in cases where our fears or idleness are concerned, is shown in the tendency to magnify things which we know to exist, but are imperfectly acquainted with. We are thus

used to magnify difficulties, and objects of dread and apprehension, and to look with false and groundless wonder upon them through the mist of ignorance.

Omne ignotum pro mirifico habetur.

Self-love, when our fears and idleness are concerned, magnifies and enhances the danger and difficulties.

8. Another effect of selfishly regarding ourselves, and thus narrowing the grounds of our judgment, is the practice of pursuing the means for the end, and pursuing the wrong means. Sometimes these means are such as suit our passions ; sometimes such as fall within our own habits and profession ; sometimes such as require the smallest self-sacrifice, and are the most easy to us.

The miser and the political economist pursue gold and wealth, as if they were the summum bonum. Some economists think only of keeping wine till it is old ; forgetful that bad wine is not worth the improving. The music-master thinks that all merit lies in execution, because it is not within his power and province to give a soul for music. The scholar thinks that the beauty of Greek lies in the dogged and difficult passages. The controversialist thinks that the spirit of religion lies in the moot points and doctrines. The epicure of meats studies the variety and perfection of dishes ; ignorant that the seasoning of a good appetite heightens the flavour of all dishes. The epicure of happiness seeks for a variety of fresh excitements and enjoyments : forgetful that abstemiousness alone can really heighten appetite ; and that the highest gratification of our desires and wishes is best secured by

lowering them. It is a common topic to suppose that certain political changes would greatly improve our own and the general happiness ; whereas the best and the worst government in the world could not make so great a difference in our enjoyments, as the raising or lowering a single appetite or desire, and the indulgence or correction of a single bad passion. This error leads all the world into the mazes of politics, to the obvious neglect of their own concerns and characters.

Now this narrowness of mind, this selfish blindness, proceeding from a too constant regard for ourselves, must by all means be rooted out, in order to fit us well for the proper apprehension, and still more for the discovery of truth.

Such an enlargement of mind introduced Columbus and Copernicus to their exalted discoveries.

A similar enlargement would enable us to look for knowledge and wisdom in many distant countries which are now despised ;—and in some churches and religions too ;—and we should discover them.

“ There are more things in heaven and earth than are dreamt of in your (present) philosophy.”

7. IDLENESS.

THE mind abhorring and rebelling against its own infirmity, and shrinking from the toil and unremitted labour to which it is called by reason of the uncertainty to which it is destined, voluntarily blinds itself to the true features and character of nature, which are endless variety and multiplicity. The first and chief form

in which this shows itself, is in a constant endeavour after classification and generalisation; which may be called the proper and peculiar prejudice of idleness.

“The mind soars after the highest conclusions that it may find rest,” says Bacon.

To effect this we shut our eyes to multiplicity and variety; to the peculiar and minute differences of things; to as many exceptions and qualifications as possible; and observe and rest only upon those points in nature in which her parts correspond and agree together. Thus we generalise facts and appearances, and assume principles from a few examples, idly and flippantly. This we do, says Bacon, *in dogmatibus, in notionibus*. The last, being the careless abstraction and generalisation of ideas, is the chief source of ambiguities in language. The first consists in forming systems and theories, and drawing principles from weak and false analogies, and retaining and using them as if they were sufficient, and positively certain. Thus one person concludes that *all* madness proceeds from vice; another that it is *all* from indigestion. One thinks that *all* prejudice arises from bad passions; another that it is *all* from nature, or education. Weak critics have striven hard to simplify the English language, and to reduce it to uniformity, till they have gone far towards destroying both its force and euphony. Tyroes endeavour to apply fixed rules to its form and spelling, and alter a dozen or two words and phrases in pursuance of their system; but those who have studied the language most carefully, have found their rules leading them only into difficulty, and that one of the most prominent

features of the English language is idiom and exception, in which lie much of its richness and force.

Ideas and truths originally conceived in the first intent, become of the second intent by idleness; the objects and facts which they were drawn from being neglected and forgotten.

2. As we combine and classify in order to give rest to our minds, so we many times divide erroneously, to avoid the labour of comprehending what is complicated. We attribute two contemporaneous natures to Jesus Christ, variously and opposingly operating at the same time, to account for seeming paradoxes and inconsistencies; whereas, He fulfils, even while upon earth, one united, uniform, consistent, and incomprehensible character. Aristotle adopts a division of the mind which he confesses to be uncertain, in order to assist him in his particular object. The soul, mind, and animal functions, are in reality only different offices of one and the same life.

3. But our most general idleness is in the voluntary submission to prejudices; especially those of education, profession, and peculiar character. Neither do we labour as we ought to overcome the natural blindness of self-love. Thought is a labour which most people seek to shun; and truth cannot be arrived at in matters of importance, without much thought, patience, and investigation. The knowledge of invisible things is to be obtained only by great and earnest labour. Objects of external and internal sensation strike us forcibly and vividly, are readily comprehended, and remembered

easily. Objects purely mental and intellectual can only be fixed in the mind or comprehended, through long-continued reflection and thought, and patient attention. Roman Catholicism is chiefly idleness in its votaries, though priestcraft in its origin. So is all idolatry. It is less laborious to believe in a god formed after the pattern of human experiences, than in one whose likeness is neither in earth nor heaven nor in the waters under them.

8. PRIDE.—VANITY.

THE ROOT AND BRANCH OF THE TREE OF KNOWLEDGE.

THE ambition and vanity of the human mind disposes it to boast itself equal to everything. It aspires therefore to subjects much beyond its reach: such as God, creation, freewill, predestination, the operation and reasonableness of prayer; and endeavours to bring them within its grasp and comprehension. And instead of examining and determining the boundary of human knowledge, which is a first point in wisdom, it busies itself in subjects which it never advances, and can never advance. The consequence of this is, that it rejects some things because they are not suited to its understanding and capacity; and receives others in an unreal, artificial, and distorted posture.

The principal form in which this prejudice exhibits itself at the present day, is that of philosophical pride, or the pride of reason. In this its most ambitious shape and character, its whole aim and pretension is, to bring everything under the dominion, and to conform it to

the standard of experience and reason, and to receive or reject it, according as it yields to or resists this criterion.

The necessary consequence and effect of bringing all things to the test of reason is, that it is our own reason. The effect of bringing them to the test of experience is, that it is our own experience.

The cold materialism of the anatomist, the subtile cavilling ingenuity of the lawyer, the close and accurate calculation and analysis of the mathematician, these are to each of them respectively their own reason and habit of mind, to which all subjects whatever, and however different, must be brought, as to an unerring standard. What reason and science will not grasp, therefore, is rejected as untenable; and consigned to the credulous, the foolish of this world, the unwise in their generation. Lunar influences upon the mind or body, or the changes of the weather, are now become almost antiquated doctrines, since science cannot calculate them; and have been given over, in company with charms, and sympathies, and contagion, to the same sentence of condemnation and oblivion. It is now not long since a majority of the scientific and learned consigned the doctrine of infection to a place among old wives' fables.

2. For the same reason that we reject opinions and phenomena which cannot be brought under the dominion of that science and reason which we set up and worship, we mould many subjects and sciences into a form which shall suit the measure and calibre of that reason, and which does not properly belong to those

subjects themselves. The principles of human life and government are reduced to statements of figures and formulæ, and we are under the rule and dominion of statistics ; and society is measured and marked out, and calculated like a clamp of bricks : as if we were only brought nearer again, or reduced to our original clay, by all the enlightenment of science and the progress of civilisation. The faculties also and affections of the mind, are mapped out and numbered with all definiteness and precision, like the provinces of Holland ; except that they are made to wage continual war instead of being united.

3. The same pride which causes us to reject and distort things which are above our reason, makes us also reject things which are beyond or contrary to our experience. This is the spirit of scepticism : the same in both cases ; which is the giant form in which philosophic pride walks the earth in all ages, and in this age more particularly.

We are disposed therefore to reject and explain away all anomalies and wonders, and all those phenomena and principles, in the physical and moral world, which are now changed and extinct, and for the existence of which we have no other evidence than the testimony of history. We also reject at once those things, at the present day, whose existence is asserted, but which we ourselves have no experience of :—miracles, Providence, dreams, prodigies, ghosts, witchcraft. By one who proceeds upon this rule, and has never felt the influence of the Holy Spirit, how can its existence and operation ever be credited ? He reasons

like Aristotle, who thus proves that the human race, birds, &c., never had any beginning, but must necessarily have existed from all eternity. "If," says he, "there had been a first man, he must have been born without father or mother; which is a contradiction." "It is not possible that there should have been a first egg, which gave a beginning to birds; or that there should have been a first bird which gave it to eggs:—for a bird comes from an egg; but then that egg comes from a bird:—and thus do they proceed continually, one from another, without their ever having had a beginning."

Aristotle reasoned justly and perfectly according to the principles of philosophy. And if there is nothing superior to philosophy, then those also are right who consider the experience of the present generation the test of all that has existed in the world, and ever will exist.

Thus does philosophy go nearer and nearer every day towards pronouncing, as it will ultimately again pronounce, that "all things continue as they were from the beginning of the creation.*"

Parcus deorum cultor et infrequens,
 Insanientis dum Sapientiæ
 Consultus Erro. †

4. So widely does this spirit of scepticism extend itself, and so great is the disposition of philosophical vanity to doubt and to condemn, that this passion for disbelief enters into every variety of subject; and particularly into

* 2 Pet. iii. 4.

† Hor. Od. lib. i. od. 34.

all those cases wherein our own superior knowledge, and penetration, and discovery, have seemingly given us an authority to doubt. A whole book or author, therefore, is at once condemned and rejected, for one single error or untruth which has been discovered in it; and very many valuable authorities are thus sweepingly rejected. All writers therefore of adverse sects or opinions, all beggars in like manner, are readily concluded to be impostors, on the ground of imposition and detection in a few instances. Thus also, everything in the world that opens an avenue, and affords a handle and topic for unbelief, is laid hold of and employed to exaggerated use and purpose, gladly and immediately.

5. Another topic of error into which the arrogance of philosophy introduces us, is the vanity and pretension of accounting for everything. Nothing is admitted to be beyond human power and penetration, or to resist the test of philosophic sagacity. The consequence is, as before mentioned, that everything is levelled to the form and stature of individual knowledge and understanding. An example of this may be seen in the recent work of an eminent philosopher, where he attempts to explain the phenomena of omens and other prodigies by the ready touchstone of a philosopher's own simple sagacity.* Works of the same kind have of late become so common and popular, that they may almost be said to be the fashion.

Are all science then, and philosophy, and learning, but baneful branches of the tree of knowledge, and

* *Salmonia*, by Sir H. Davy, pp. 153 to 160. See an extract under the *Prejudice of Theory*, p. 350.

proper only to be condemned and rejected? God forbid! and how could we dare to say so, without the sanction of an express Revelation? How can we dare say so, who have received the Gospel through the instrumentality of navigation? who have communicated it to a new world by means of the compass, and through other improvements in the same science; and are now diffusing it to millions who sit motionless to the present day in utter pagan darkness; when by means of learning and science, and of that vast engine, printing, we see the languages in which the apostles spake multiplied by hundreds, and their tongues by tens of millions? When we see the lame and impotent, through the surgical art, leap from their couch daily, and not tens, but thousands restored annually to sight, of whom ten in a hundred perhaps were *born blind*; while not five efforts of skill in a hundred are unsuccessful:—how can we possibly say that knowledge should be rejected, and like a tree which is entirely corrupt and rotten, given to destruction? Knowledge has become an innate appetite and principle of our nature; and like other appetites it now ministers to our strength and stature, and the growth and continuation of our nature; and has already become to some extent the means of counteracting and healing the manifold corruptions of soul and body, which itself originally engendered and inflicted upon the whole creation. For God brings good out of evil.

But, like all other appetites, the thirst for knowledge and learning may be turned to both good and evil purposes; and may become, according to its use and exercise, either chastened or inordinate. There is a philosophic pride, and there is a philosophic humility. The

first leads us constantly to the conclusion of our own wisdom, to the persuasion that each new point which is gained is at length the summit of knowledge and attainment; and for ever clothes us in contented error and ignorance. The second reminds us always of our former ignorance more than of our present discovery; and increases modesty and mistrust of ourselves with increase of knowledge. It feels after and discovers the actual and necessary limits of human learning, and trusts for what is beyond that limit to divine instruction; and thus it leads the mind on to faith, and wisdom, and truth.

6. If it is possible for prejudice to be of a more exalted kind than this which is above mentioned, it is that which exhibits itself under the form of *spiritual pride*.

This prejudice lays its foundation both in our strength and in our weakness; supporting itself at the same time upon our own reason, and upon the necessary reliance on divine authority. Whatever our reason thinks fit to dictate, whether of rule or interpretation, in things relating to religious doctrine, this prejudice pronounces it at once to be consecrated, and enforced by divine command as necessary to salvation. Such being the awful consequence, it must needs be our imperative call to propagate it; it must needs be our bounden duty, at all cost and all hazards, even by fire and sword, to enforce it, and to bring all whom we can within the pale and privilege of a so essential principle.

We are always more violent in maintaining a borrowed principle and opinion, than one which we have formed for ourselves with care and reflection; and for this reason, that, in the former case, we are incapable

of reasoning upon it according to its true merits, and of estimating the real weight, connexion, or opposition of that which is opposed to it. The *followers* of a party, therefore, are the most violent and intolerant in their opinions.

Here, then, we have the divine word for our text, and our own sufficient understanding for interpreter ; therefore we cannot choose but be loud and positive in our sentence and denouncements. Those also who adhere most strongly to the letter, and to outward things and ceremonies, and understand least of the spirit, which has in it life and elasticity, are those who, with the Pharisee, are ever the most forward and prone to dictate obedience and uniformity.

But where is the confirmation of our own reason and standard ? It is ever ready at our hand. We have made one proselyte ; or gained, rather, one admirer ; or, if that is wanting, our own self-admiration and self-approving conscience is sufficient, if not superior. Then is our call and enlightenment certain. So now we have a sure text, an infallible reason, an approving conscience, a successful ministry. What more then would we have, or what should hinder us from dictating creeds, enforcing precepts, explaining mysteries, calling difference of experiences, reprobation, — difference of opinion, heresy ; — though the divine word of truth and wisdom possesses always that spirit and latitude of expression and meaning, which perfectly adapts it to all the different situations, and circumstances, and understandings, and temperaments, of all the whole races and multitudes of persons which are intended to be brought under obedience to it : namely, all mankind.

9. THE BEAU-IDEAL.

THE FLOWER AND FRUIT OF THE TREE OF KNOWLEDGE.

THE pleasures of the mind are provided and offered to us for *recreation*; and, like bodily pleasures, when indulged in with temperance, and used by us, not as a habit, but an exception, invigorate and refresh the vital powers and energies, and increase both the health and stature. But indulged in as a habit, all pleasure is enervating, and impairs that vigour and strength of constitution which is requisite to perform properly the business of life.

Intellectual pleasures in the same manner are not fit to be made the habitual food of the mind. The essential characteristic of the beau-ideal is, that it is opposed to the general and ordinary tone and features of nature. The multiplicity of nature being comprehended only with effort, the beau-ideal, whose object is gratification only, proposes unity as one of its essential characteristics. Nature is mild and tame in her general character, but pleasure requires excitement; exaggeration, therefore, is another of its peculiar principles. Thus, seeking only the gratification of the mind through pleasing excitement, the beau-ideal generally opposes nature, or adopts such parts and specimens of her works as are exceptions only, and not fair examples of her general operations.

The indulgence, then, of the beau-ideal is a species of intoxication, produced by the use of an inviting

stimulant; which, though it may give vigour and animation for the instant, must at length enervate, if indulged in habitually, and in the event, destroy the taste and appetite for wholesome food.

The beau-ideal is chiefly exhibited in the productions of the fine arts. In the drama, in which, except in novels perhaps, it comes the nearest to real life, its exaggeration is exemplified in requiring that youthful male characters should be represented by women. Its unity and hyperbole are exhibited in the rapid and condensed workings of the passions and the power of persuasion, by means of which, events are controlled and brought into completion in a few minutes or seconds: in the glare of light: the scenes and occurrences of many days and places brought together into the space of one hour, and upon one stage;—and all these are a species of intoxication, excitement, and untruth, which are opposed to nature as a downright contradiction. These are the characteristics also of the kindred arts of painting, poetry, oratory, and sculpture. In the last, which is the most perfect and ideal of the manual arts, in which the one sole principle, of beauty in form, is made the shrine of worship, the mere addition of the colouring of nature would be entirely destructive.*

Now, by a too familiar and habitual acquaintance with these artificial patterns and productions, the appetite and taste for nature becomes blunted, and vitiated. We can no longer be nourished by the simple food and flavours of truth and reality; but such things are vapid, tasteless, and unpalatable; and fresh varieties and

* Sir J. REYNOLDS's *Lectures*.

novelties must be constantly sought after, to stimulate and excite the appetite. This is particularly the case with respect to real life. From the habit of studying human nature in novels and dramas, in which the passions are all greatly exaggerated, in which the characters are exhibited either in a very bright light, or in a deformed point of view, without variety or admixture of qualities, without gradual and progressive improvement, we cannot but derive opinions and impressions very contradictory to the reality of nature. We form notions and expectations of faultless characters, of perfect beauty, of transcendent genius; whose splendour is everywhere to be found, and is ever unabated. It is wholly impossible but that a taste so formed must loathe the dulness and reality of common and domestic life, and exist only under the excitement of the theatre and ball-room, and the forced brilliancy and animation of polished conversation.

The beau-ideal characterises classic literature; that mould of heathen wisdom and learning, that serpent of the tree of knowledge, with which, during a millenium of error and prejudice, we have voluntarily enfolded ourselves, till we had well-nigh stifled our religion of infantine simplicity in its insidious and deadly coils.

The passion for system, without which most learning and instruction would be unpalatable to a refined and classical taste, has one of its sources in the beau-ideal. Classification and system are the poetry of philosophy; and all Grecian literature is, with little exception, poetical. Begun in idleness, modelled in fancy, and finished in the laboratory of pride and vanity, almost every philosophical system is a romance.

The merits of Aristotle's categories are thus enounced by one of his admirers.* "By the ten categories we are taught to marshal every term that can enter into a proposition either as a subject or predicate; by the five predicables, we are taught all the possible relations which the subject can have to the predicate. Thus the whole furniture of the human mind is presented to us at one view, and contracted as it were into a nut-shell!" Not less sublimely absurd and poetical are the perfect standards and models which the mind daily delights in; such as the "idea" of Plato, the intellectual beauty of Shelley, the standard proportion of the human body dictated to nature by Albert Durer, and the standard forms and proportions of architecture dictated by theorists to modern taste.

It is impossible that a mind formed upon such models and principles, and habituated to such high-seasoned and concentrated food, should have any taste or appetite for simple truth and nature. It is a common topic of objection against truth and reality,—Oh! that is not worth knowing! That is too stupid! The reality of nature does not rouse and stimulate, does not flatter and intoxicate, does not elevate us to a higher and higher sense of our own powers, and of the dignity of human nature; and therefore it is unpalatable. Such a system for example as is contained in this treatise, is too tame and insipid, too uningenious and natural by far, to meet with much custom or approbation. The "law of mind" is too vague and uncertain, the "fine and varying line of truth" too intangible and inde-

* REID'S *Analysis of Aristotle's Logic*, chap. 2, sec. 2.

finite; the search after truth through sobriety and self-conquest too low bred, too unfashionable and degraded, to obtain many votaries, or steady admirers. If eraniology has any foundation at all in truth and nature, it is true only within such limits, and to such a qualified extent, that few if any of the existing race of philosophers, at least of all its at present most sanguine advocates, would study or value it.

It is obvious then, that as bodily pleasure and excitement, when made a habit and business instead of a relaxation, must undermine the principles and character, so the indulgence of imagination to excess, and a devotion to works of fancy and to the fine arts, must be destructive of truth and sound judgment: that is, of the principle and character of the mind; and not a little even of moral sobriety. It is not the fact that the fine arts, a refinement of taste, and classical literature, chasten and improve the moral character. On the contrary, some of the *most* refined in taste, and the most elegant and learned in their acquirements, are, as may be observed at the present day, the most degraded and most immoral in their practices. Refinement, and taste, and classical acquirement, may provide us with a fair dress and external deportment; but these frequently serve only to gloss over, and give a becoming drapery to the grossest vice and deformity; and elegance and refinement of taste are quite as consistent with abandonment of moral character, as the most polished manner and the most finished etiquette, though these are founded upon the rules of charity and kindness, are with a bad heart and an untempered selfishness.

The worship of the fine arts was one principal occasion of the Romish practice and idolatry. Hea-then temples, and paintings, and statues, were first spared from destruction, and then sanctioned, and lastly, they were encouraged and held sacred, from a devotion to the fine arts; and Christ was and is daily sacrificed again upon the altar of taste.

The beau-ideal is *intellectual passion*:—and it is not in human nature for a man to yield himself up to the dominion of any one passion, which he suffers to grow and to rage unmoderated, and himself to remain at the same time master of the rest. He, therefore, who is a transgressor in this one point willingly, is sure in some degree to be guilty of all: which is a principle of truth in logic, as well as in religion.

10. THEORY.

THE prejudices are intimately linked and interwoven together, and are as it were but different exhibitions of one generally prejudiced mind. But as they assume certain particular forms and characters most prominently in different minds, according to the peculiar habits and passions, it is convenient to bestow on them a separate treatment, according to these distinctions. We speak not particularly of individual prejudices, upon some one subject of peculiar habit and interest, as these do not readily fall within the topics of general instruction; though these also will be more obstinate, or more open to correction, ac-

according to the general state of logical neglect or cultivation of the mind. The prejudice of theory might have been fully illustrated in discussing some of the previous branches; but from the great extent and importance of its influence it demands a distinct consideration.

The desire of system is natural, as a help to our infirmity. Ingenuity is ever awake and active to suggest new principles to nature; and the vanity of invention is ready at hand to approve them to our own judgments. The warmth of fancy, and the blind disposition to assimilate everything to the pattern of our own minds and nature, carry quick conviction to the general mind of everything that is novel, and simple, and ingenious. Thus we are continually led onward by ingenuity and vanity, by novelty and simplicity, to a blind and precipitant advance in new roads of conjecture, the far greater number of which lead only to error. The world has a passion for theory; which it follows with a mad blindness and devotedness, as a lover does his mistress; and embraces it in every form and place, in which it ever but momentarily shows itself.

One theorist has reduced the human form entirely to a system of circles. Others have reduced every action in nature,—thought, life, fire, electricity, magnetism, gravity,—to one common principle, the *Anima mundi*; and Dr. Paris, in accordance with this theory, has pronounced that the sudden start which we frequently make when just upon the point of falling asleep, is in effect an electric shock in the head or

somewhere else. Descartes, and Galen before him, thought that the seat of the soul was the pineal gland, in the brain; others have since placed it in the corpus callosum. Life is said by some to be a *balance* of the vital powers; short-sightedness, by others, to be caused by education in small rooms. Burke discovers the origin of chivalry in King Stephen's licence to the barons to build castles; and the lawless tyranny which ensued in consequence. Animals, says Diodorus, were originally bred out of slime, (namely, of chaos;) as mice now are out of the mud in Egypt.* Marius, says Blackstone, new-modelled the Roman legions, by enlisting the rabble of Italy, and thus laid the foundation of all the military tyranny that ensued.† Taylor, speaking of our open grates, says, to them is owing perhaps in a great measure, the rosy complexion peculiar to the English.‡ Barry proposed a theory, that pulsation occasions old age and death, by attrition; that the way to prolong life, therefore, is to retard pulsation. "Omens," says Sir Humphry Davy, "are for the most part founded upon some accidental coincidences; but spilling of salt on an uncommon occasion, may, *as I have known it*, arise from a disposition to apoplexy, shown by an incipient numbness in the hand, and may be a fatal symptom."§ These are all theories which have in their turn dazzled and amused the world and their inventors, and have found their

* Book I. chap. 1.

† *Commentaries*, vol. I. p. 414.

‡ *Key to the Knowledge of Nature*.

§ *Salmonia*, p. 158.

warm admirers and votaries among great and learned men ; and thus are we led continually astray from the safe and sober path of wisdom by these will-o'the-wisps of philosophy.

But the limit of the evil is not in the theory itself. This habit of speculation when indulged in and encouraged, undermines the spirit of truth and genuine philosophy. There is no temptation to untruth so strong as a theory. The pride and vanity of philosophy is intense. The love of a man's own invention and discovery is as a woman's love for her offspring. He has pained and travailed for it. He will sacrifice his soul to foster and nourish it. Philosophers are not unfrequently the least upright of men. There are few if any of them who always give the true reasons for their own opinions, and uniformly support them by the same steps and upon the very same grounds, by which they themselves have been led to a conviction of them. But they support them by arguments which are merely plausible and captivating, and by facts and authorities subsequently sought out and collected, not for the purposes of truth, but of victory ; which are for the most part tortured, misquoted, and exaggerated. An example was given above, in Aristotle's proof that happiness is produced by energy.* And instances are so many and frequent in daily reading and conversation, that the invidious task may well be spared of collecting and repeating them. Now, the extreme vanity and rage for accounting for everything being

* Page 79, 80.

considered, and the haste and flippancy with which new theories and systems are adopted, the wide and important consequences of this prejudice may be well apprehended.

Nevertheless, all theories whatever are not in themselves necessarily mischievous. Every new and as yet unconfirmed opinion and speculation, is for the time a theory. Newton's and Harvey's systems were at first but theories, as much as those of Galen, Ptolemy and Descartes. But their dangerous and insidious tendency should be constantly kept in mind and estimated, particularly by the inventor. And since the vanity of discovery, and the study to simplify and to evade the intricacy of nature, are the most operating inducements, those theories are the most to be considered and suspected which have in them the greatest simplicity, and are the most flattering and beautiful from their novelty and ingenuity.

Theory also has this use in it, that it is a spur to labour, and to the collection of important facts and experiments; in which respect it acts like bad passions, which operate to the production of useful actions, and that oftener, it has been said, even than the better motives, from their greater number and activity. So perhaps in like manner, more useful facts in philosophy have been collected and made known, in the endeavour to support fanciful and groundless theories, than by persons occupying themselves in the more simple and disinterested, and humble search after truth.

11. FAISE ANALOGY.

A MULTITUDE of false opinions and theories are founded upon false analogy; and false analogy itself arises from a narrow and partial view of nature; and in general from a too great adherence to sensible and external objects. But in all cases it arises from not viewing each subject according to its distinguishing and specific peculiarities; and from the greater relief and ease which the mind experiences from dwelling upon resemblances rather than upon distinctive features.

Hence some have supposed that the glands secrete chemically;—others that mercury assists the secretions by entering, through its extreme divisibility, into the minutest vessels, and thus opening a passage. Some persons, regarding only the *word* lightness, have supposed cream to be lighter than milk *of digestion*. Some others, drawing their analogy from human sentiments and weakness, have thought that God can never condescend to have regard for mortals, much less for insects. Some raising their views no higher than visible motions, have considered the whole world and creation to be a machine; and as a result of this notion, that it must have that property which in human machines would be perfection, namely, a perpetual motion,—having no need of aid or special superintendence from the power of Providence. But a perpetual motion, that is, an independent and self-sufficient instrument, is as contrary to the laws of God

as of mechanics ; and has been so attributed only from a false analogy to human operations, — for it is *our weakness* only which renders such an invention at all desirable. Savages, whenever they see motion, as in a star or in a watch, suppose the existence of life and of a soul. The analogy is a false one. But surely they are wiser, and more understanding, and more free by far from prejudice, than those who, having devoted themselves exclusively to the *laws* of motion, believe that they can thence account for the existence of it, — as, in the motions of the heavenly bodies, — and forget the first agent ; respecting which subjects, the above-mentioned belief of savages is more correct than that of many philosophers and mathematicians. To this extent and purpose, the notion of the existence of an *Anima mundi* is correct : that, as one principle of life operates the various functions of thought, and of sensation, of growth, and of nutrition, and all the vital energies of the many parts and organs of the human constitution, — so the One Almighty all-pervading Spirit operates animation in all the parts and members of the universe, without which, neither life nor motion, nor attraction nor matter, would exist.

Metaphysics, as has been already observed, has its origin in this prejudice ; and idolatry in metaphysics. The Egyptians drew their analogies and systems of divine things from the material universe ; and cycles of the heavens afforded them dynasties of their gods : the courses of the stars, their exploits and histories. The Greeks derived their analogies from human nature, and attributed to their gods all the passions and vices of humanity. According to them, all the

parts of creation, and the Gods themselves, were produced from one another by procreation ; and love was the all-creating principle, and *primum mobile* of the universe. Another doctrine which arose out of the same false principle was, that all creation was the production of chance. Very clear and definite notions of reasoning, indeed, must those sages have entertained, who thus argued :—who could so far abstract their minds and ideas from all realities but one, as to draw an analogy from a toss of the dice to the structure of the eye, the mechanism of the human foot, and the architecture or expression of the human head and countenance.

But the invitation of theory is so seducing, the rest afforded by a resemblance, in the mazes of speculation, is so pleasant and composing, that there is no comparison or analogy, however far-fetched and full of absurdity, but philosophy is ready to flee to it for a time, as the desired lap of truth and wisdom, to slumber and repose in.

We are free from these particular errors ; and idolatry and scepticism do not take these particular forms in the present day. These false lights have gradually been extinguished, and eclipsed one by one, by the beacon light of Revelation, as it has been brought into comparison with each of them successively, and by the slow correction of reason. But still we are daily and hourly attracted and caught by every weak candlelight that is held out to us, in the midnight path of knowledge and learning which we have voluntarily chosen for ourselves. There is one open road of real truth and knowledge, which is

illuminated by a broad blaze of eternal light, for those who are contented to walk safely in that meridian sunshine.

12. LANGUAGE.

THE fallacies of language derive their chief strength from a misapprehension of its real value and capabilities; and it is of greater use to correct this prejudice and misapprehension, by showing the general weakness of the instrument, than to enumerate the great variety of branches into which its imperfections separate themselves.

The utter impotence of language as a vehicle and representative of truth, has already been shown in the First Book. It is modelled according to the standard of ordinary minds and apprehensions; becomes still more unmeaning and indefinite in the polished circles of society; and full of vulgar misapprehensions in the lowest. Among philosophers and men of learning, though language is more precise and definite in its use and meaning, yet almost every term involves an opinion and theory; and becomes, therefore, an unfit vehicle for general communication. In consequence, all persons who are possessed of much depth of thought, and any great force and accuracy of meaning, find in general great difficulty in expressing themselves; and every original thinker and discoverer complains greatly of this weakness, poverty and insufficiency of language.

The first imperfection is the indefiniteness of language, arising from the same terms being applied to

things connected only by analogy; as "heat" to the effects of wine, fire, passion, and spices: "lightness," to matter, colour, and digestion; or applied in different extents: as "heaven" to the atmosphere, the universe, and the place of future reward: "earth," as distinguished from the other elements, as distinguished from the ocean, as distinguished from the rest of the planets, or from heaven. This indefiniteness arises from there being fewer words than ideas; and partly from the vagueness and inaccuracy of ideas themselves. With regard to the ambiguities arising from the paucity of words, it is chiefly requisite that this necessary imperfection should be fully known and appreciated, in order that the true application may be sought after with attention. With regard to the vagueness of ideas themselves, the means of rendering them more accurate, and the necessity of ascertaining them in the first intent, have been already treated of and pointed out sufficiently.

2. The common and consecrated metaphors of language, which mostly represent some common vulgar notion or explanation, tend greatly to limit the power and truth of expression, and the independence of thought. All language is full of these metaphors. Each substantive for the most part has its own appropriate verb which attends it like its shadow upon all occasions, and is considered essential to correct style and composition; and this is mostly metaphorical in its application. We are "fed" with hope, "overwhelmed" with joy, "inflamed" with love, "fired" with indignation, "penetrated" with grief, "filled"

with admiration. The same in compounds of substantives. Thus we say habitually, “images” of the mind, “current” of ideas, “chain” of causes, “impulse” of thought.* These show the arbitrary nature and power of language, its poverty and insufficiency; and the manner in which it leads and forces ideas, and confines and narrows them. The consequence is, that a person of independent and accurate thought, not choosing to be led by, or to adopt the same metaphors, which put a constraint and a false colour upon his meaning, cannot readily and with satisfaction express himself. This error and untruth of proverbial phraseology is thus accurately and pointedly noticed by Dr. Johnson. An earthquake had happened in Staffordshire in 1777. Dr. Johnson remarked on it: “Sir, it will be much exaggerated in popular talk. For in the first place, the common people do not accurately adapt their thoughts to the objects; nor secondly, do they accurately adapt their words to their thoughts. They do not mean to lie; but taking no pains to be exact, they give you very false accounts. A great part of their language is *proverbial*. If anything rocks at all, they say *it rocks like a cradle*; and in this way they go on.”

All the other instances of metaphorical and hyperbolical expression which are in use, are of the same character, and have the same evil tendency.—“All the

* The following passage from Young furnishes a good example, every clause of it containing an approved metaphor:

Retire, the world shut out, thy thoughts call home;
Imagination's airy wings repress;
Lock up thy senses; let no passions stir;
Wake all to reason; let her reign alone.

world knows," "everybody says," "as clear as daylight," "as white as snow," "as black as a coal," "as yellow as a guinea:" without which language would be dull, flat, and unpalatable.

3. The next important fallacy in language arises from names and expressions being used habitually which involve some theory; and which, representing in reality some certain facts only and phenomena, pretend to express some cause or principle which is proved to exist. Thus we have had mention made, in geology, of primitive, transition, and secondary rocks: in chemistry, of the elements air and water: of the magnetic, electric, and nervous fluids: of phlogiston and caloric. These are not the vulgar inaccuracies of ordinary understandings. They express the thoughts of their inventors perfectly. But they do not the less fetter the understanding, and bind it down to the peculiar principles and opinions of those who have undertaken to be our guides and leaders in the field of science. Technical terms are the bane of those sciences in which we may hope for further progress and discoveries. They are the waymarks in the wilderness, to guide us into those tracks which have been already trodden. They make our way and journey easy up to the points at which our forerunners have been compelled to stop; but they have induced us to advance so carelessly and easily that we have never stayed to examine the road; and instead of looking for any points of error, we hasten to arrive at and to extend that limit at which all former travellers have been checked, probably for the reason that the path which they have chosen leads

no further. When technical terms become popular, and are used, as they soon are, only in the second intent, discussion then arises upon the words rather than upon the ideas, and knowledge ceases any longer to advance.

So much has been written already by many others upon the fallacies of language, that it is scarcely necessary to do more here than to make the foregoing mention of them; for the sake of impressing a proper notion of its general insufficiency. It may be useful however to subjoin the following summary made by Aristotle of fallacies in language or diction, extracted by Reid from his Book of Sophisms.*

“The first is, when an ambiguous word is taken at one time in one sense and at another time in another.”

“The second, when an ambiguous phrase is taken in this manner.”

These have both been sufficiently exemplified in the First Book, in the chapter on Language.

“The third, and fourth, are ambiguities in syntax; when words are conjoined in syntax which ought to be disjoined, or disjoined which ought to be joined.”

Instances of the misuse of grammar and syntax have been given above in the chapter upon Truth; in that part where some of the sophisms of the schoolmen are analysed.

“The fifth is an ambiguity in prosody, accent, or pronunciation.”

This also was exemplified in the former chapter upon Language.

* REID'S *Analysis of Aristotle's Logic*, ch. v. sect. 3.

“The sixth is an ambiguity arising from some figure of speech.”

This has been sufficiently shown and illustrated in the present chapter, under the fallacy of metaphorical and proverbial expression.

The fallacies arising from inaccurate ideas, of which those of language are in a great measure the echo, have been fully treated of, and the remedy for them suggested, under the head of Apprehension.

IN this enumeration of the Prejudices, I have comprehended all Bacon's Idols, and more. They are more or less allied to, and blend into one another: as do Bacon's *idola*. My illustrations, and the relative prominence given to each of them, are not his; my arrangement having reference always to a moral Logic, a logic for human life, and not for the advancement of natural philosophy and physical science: all which I hold comparatively cheap; while for those who value them most, Bacon's logic may be a fitter and more applicable instrument than mine.

The *idola tribus*,—idols of the natural mind and character,—correspond to the 1st Prejudice—“Prepossession,” and partly to the 4th Prejudice,—“Natural Disposition and character.”

The *idola specus*,—idols of education, habit, fashion,—correspond to the 2nd, 3rd, and 4th Prejudices,—of “Education;” of “Profession, habit, fashion;” of “Disposition, character, peculiar talent.”

The *idola fori*,—of Language, words,—correspond to the 12th Prejudice,—“Language.”

The *idola theatri*, of Theory,—are the same as the 10th Prejudice,—“Theory.”

The 5th, — “Self-deception, untruth;” the 6th, “Self-love, Egotism;” the 7th—“Idleness;” the 8th—“Pride, vanity;” the 9th—“the Beau-ideal,”—all being of a moral character, and having their chief application in moral subjects, and the business of human life,—have no place in Bacon’s system and aim; and are therefore additions to his enumeration.

The 11th Prejudice,—“False analogy”—may have its origin and seat in natural infirmity and disposition—confounding things in themselves distinct (*idola tribus*); or do so, following a peculiar propensity, school, fashion, party (*idola specus*); or, being involved in the metaphors and ambiguities of language (*idola fori*); or in false theories (*idola theatri*). It has also many other origins and applications; being an aberration of apprehension and judgment through any infirmity or misdirection of mind. It is a Prejudice, or idol, in itself; generally entering into and disposing to all error: in human affairs and interests especially.

P R E F A C E

TO THE

THIRD AND FOURTH BOOKS.

THE former Books have scarcely risen higher than to a moral mould and adaptation ; though religious illustrations may have been occasionally introduced.

It was necessary that this should be made the field and limit in a first treatment, for the fettered mind must be brought out of its dungeon, and liberated by gradual operation ; otherwise it would only shut its eyes more closely against the opening landscape. But we may now aspire higher, and draw somewhat nearer to the region of the religious, in reasoning.

The two former Books have been more systematic in their form, and more suitable, in that respect, to what is generally considered to be one of the essential characteristics of science and developed knowledge. But the more highly a subject rises upwards towards vital truth, and real and religious wisdom, the less it becomes capable of system, and of exact order and distribution.

“ Exactly as a subject rises to a nobler elevation, our knowledge becomes more incomplete. Complete-

ness, indeed, is but another name for ascertained limitation.”*

Some repetitions may be observed, and objected to. And it may be suggested, Why have not the matter of the two last and the two first Books been amalgamated together, and each subject made separately distinct and complete? My answer is, that such a process would seem to me to be a confusion of idea. There is a distinction of spirit and of method, as well as of subject. It seemed to me that it might be asked with the same reason, Why was not the Book of Deuteronomy incorporated with the Books of Exodus and Leviticus? It is for the reason, namely, that the same subjects and truths may be treated in a lower and in a higher tone, and with a higher application. The lower treatment ought to be the foundation of the higher; and the foundation must be made good before the superstructure may be built upon it. The foundation may fitly be more solid and simple and squared; the superstructure may be more lightly and finely wrought, and more intricately varied, yet the perfection and finish and the grace are in the copestones and the cornice.

Those who are enlisted and interested in the first Books, the lower rooms, will not be unwilling to mount and examine through the upper stories; but those who are stopped at the threshold and entrance, not liking the structure and style, would not be the better at-

* Westcott, *Gospel of the Resurrection*, Introduction, § 13. Here completeness means system, definite arrangement.

tracted and pleased to explore the more intimate recesses, if all the apartments were brought together upon the ground-floor. Though the same topic may be treated a second time, and the same heading given to a chapter, each will be found treated in a new aspect, and with a higher aim, and with a view to a superior application. I have, in the Third Book, attempted a more elaborate refutation of Aristotle's system of Logic. I have been encouraged and assisted in this by meeting with other authorities to support me in my views, with which I had not become acquainted when I printed the first two Books,—especially Dr. Tatham's Bampton Lecture, "The Chart and Scale of Truth," preached in 1789; and reprinted in 1840, a year after the first publication of my Logic, with editorial notes by Mr. Grinfield. To have added these additional refutations and authorities in the First Book, would have been to destroy the proportions of that part of the treatise. It was better and sufficient there to deal with and point out the fundamental error; with the removal of which the whole superstructure of syllogism must fall. At a future period,—when the theory of Aristotle is disused and out of date,—as it must be eventually,—and when the topics of the Fourth Book have been enlarged upon, and carried further, as they must and will be—by other hands,—this Third Book, or the greater part of it may be omitted, in a subsequent reprint. The reading of it may be passed over now by those who are not votaries of Aristotle, and who wish

to get quickly to the ultimate conclusions. But I think the reading of it will be profitable, as laying a foundation for what follows, by exhibiting the contrast between Grecian reasoning and heathen philosophy, and that form of mind and habit of thought which is proper for the pursuit of moral and religious truth.

I know that the empire of Aristotle must be eventually put down: if for no other reason, for this, that the commercial and practical schools will beat the classical schools in the race of life. I know that some of the principles first suggested in this treatise must make way, and ultimately prevail. But how long it may be before these things take place I cannot venture to assure myself. Ideas, principles, and practices now advance and change with ever-increasing rapidity, and more and more, in a geometrical progression, every day; and what will eventually be may come to pass at any time. One of the things most certain of any is, that the empire of Grecian wisdom will decline and be dried up, and that Christianity will emancipate itself from heathenism. Heathenism has reigned in, or at least leavened, and coloured deeply, philosophy, morals, and religion, from the fourth century, and even earlier. But the times of the Gentiles are fulfilled. The fashion of everything is being shaken and re-formed, in politics, in society, in religious organization. I feel encouraged and constrained to throw in my contributory work towards the fashioning one of the main pillars of the educational and social system.

BOOK III.

CHAPTER I.

INTRODUCTION.

WHEN I published the two first Books of my Logic in 1839, I was not aware that the same subject, and in some measure the same view, had been taken up before by any one, and that by no less a person than Dr. Tatham, late Rector of Lincoln College, Oxford. Much of my labours in the disproof of Syllogism might have been saved, or at least I might not have thought fit to undertake them, if I had known of the unqualified condemnation of that instrument which had been given by Dr. Tatham, and by other writers, whose authority was likely to have more force and effect than any demonstration of mine, however sufficient.

Nevertheless, I am glad that I had not become acquainted with Dr. Tatham's protest, and so been deterred from adding my own efforts in the same direction; because, independently of my not holding Aristotle's Logic in exactly the same degree of estimation, and of my not agreeing with him in the new system of Logic which he proposed in substitution for

it, I think I have more simply and completely analysed Syllogism, and pointed out its futility and impotence in my First Book ; and I purpose now, in continuation, still further to show the actual position and office which it holds in demonstration and argument.

Dr. Tatham proposed his refutation of Aristotle, and his suggestion of a new and better system of Logic, in his Bampton Lecture of the year 1789. And though many of his most pointed protests,—among them most of those which I am now about to cite,—were not printed in his first Edition, but being left by him in MS. were added by way of appendix in the second Edition, compiled by Mr. Grinfield and printed in 1840,—a year after I published my New Logic,—after his death, yet I think it a disgrace to the University that the demonstration which had been given in his Lectures, upon which his opinion and protests were founded, had been totally forgotten, and were not noticed or known when I was taught Logic at Oxford from 1819 to 1822 ; but Dr. Tatham, who was then head of a College or Hall, was only esteemed to be a clever man it was true, but a very crotchety one.

I esteem the unsettling of religious opinion, and its disruption into Tractarianism, and Arnoldism, and Broad-Churchism, and Ritualism, at the universities and among our clergy, to have been the natural and *necessary* result and consequence of their never having introduced or recognised a more adequate system or instrument than that wretched Logic of Aristotle, epitomised by Aldrich,—the mould and measure of the Heathen mind and wisdom, in science, in morals, and religion,—made imperative by the University statutes.

It is true that they have enlarged their views so far, at Oxford, as sometimes to recommend the use of Butler's Analogy to the young men. But this is only in addition, not in correction of, or in disparagement of, the doctrine of Aristotle; nor with any suggestion that it is in opposition to, and disproof of, the efficacy or adequacy of the other.

I condemn quite as much the use of Mathematics as a model and mould of reasoning in the other University. It is the counterpart of Aristotle's Logic, which is founded and fashioned upon forms. In consequence it is as pernicious a preparation for the study of morals or religion as the other; as I have also indicated and illustrated in the First Book, and hope still further to illustrate.

Dr. Tatham thus pronounces (Vol. I. Appx.) :—*

"Syllogism forms professedly the whole scope and burden of this celebrated work" (Aristotle's Analytics); "which, as may be expected from this view of its origin, is peculiarly adapted, if not almost exclusively confined, to that species of reasoning which is properly demonstrative. See Analyt. Poster. chap. 4. § 2, and chap. 7, § 2."

"All the legitimate modes and figures (of Syllogism) are reducible to some of the modes of the first figure, and derive their proof and authority from that reduction. See Analyt. Prior, cap. 23, 24. Now, the reasoning in the first figure is absolutely demonstrative, and Aristotle observes, that all mathematical reasoning is reducible to syllogisms of the first figure." "We

* The Chart and Scale of Truth. Bampton Lecture by Edward Tatham, D.D. Edited by E. W. Grinfield. 1840.

may conclude, by strict analogy, that the *Analytics* of the same author (Aristotle) is the philosophy or *rationale* of demonstration, investigating its principles, and delivering the laws and rules by which it has been conducted, or may be advantageously continued. And thus, if what is advanced in these lectures in reference to the kinds of truth, their different principles, reasoning and constitution, be at all well founded, this part of his *Organon* is no more calculated to supply the rule or art, by which reason can push on her inquiries in physics, ethics, or any other branch of learning from which demonstration is excluded, than his *Rhetoric* is the rule or art of writing a poem, or his *Poetic* the rule and art of composing an oration."

"In the *Analysis of Demonstrative Reasoning*, he had beheld the wonderful and immediate effect, which the universal form or category of quantity (the especial subject of mathematics) possessed in the production of axioms or self-evident truths, as the principles of syllogistic argument; and he cherished the hope that the other nine" (Categories, viz. of Substance, Quality, Relation, Where, When, Position, Possession, Action, and Passion) "would furnish axioms with almost equal ease, from which men might reason syllogistically on every possible question, and which they might apply in proof and elucidation of every kind of knowledge."

"To complete this great design, at the end of the *Analytics*, he added his book of *Topics*" (of Probabilities).

"It was fatal to the discipline of the schools, whose main object should have been the discovery and communication of universal truth, and which should train

up the mind in the right method of science,—that the Topical part of the Organon of Aristotle (which affects to be of more importance and extent than the Analytical, as establishing the principles of all the parts of learning excepting the demonstrative, enacting the laws of all probable reasoning, and guarding that reasoning from all possible error) is weak in its foundation, and consequently defective in all its parts. Here we behold this great Peripatetic falling from the strength and dignity of the philosopher, displayed in the Analytics, into all the weakness and credulity of a sophist. Instead of analysing the several subjects of inquiry, as they present themselves before him, and investigating the secret causes of their truth, he rests, without examination, on the bare authority of others, and erects the principles of his reasoning on their opinions, or on what was merely analogous to their opinions.”

“The cause of this great defect in the Organon of Aristotle may be traced to his blind and extravagant love of Syllogism.” “To this should be added his ignorance or rather neglect of Induction, that sound and fundamental Logic, by which alone those principles and general propositions, the sole support of useful syllogism in probable reasoning, can be firmly and philosophically established. He mentions induction no doubt in different parts of his works; but its particular operation he neither employed nor understood.”

“Instead of descending to the canvass and examination of those individuals” (*i.e.*, particular facts and phenomena) “which constitute each branch of science, or ascending from them to generals, by successive and laborious steps, he pursued and dictated the more easy,

but more fallacious method, of raising topics or common axioms, as the basis of dialectic reasoning. He applied immediately to the Categories. From these he drew definitions and propositions, as from a mine unexhausted and inexhaustible; but which, being bare assumptions unfounded in the real nature and qualities of things, had their resources only in imagination or ingenuity of invention. These became prolific of a verbose and artificial, but insufficient logic, and productive of a pompous, formal, but useless and phlegmatic discipline,—a discipline which, instead of the advancement, has proved the obstacle and impediment of all real knowledge.”

“The Organon of Aristotle, instead of being, as he vainly hoped, the instrument of all truth, has been the instrument of ignorance and error. Thus this great philosopher has proved in the event the greatest tyrant in the universe.”

Yet this weak and fallacious instrument,—dangerous also to the highest degree, because professing to be adequate, and infallible also, in subjects to which it is altogether unfitted and unequal,—has been elevated and as it were deified to a place and authority which is altogether destructive, in our universities, whose pretension is that they are the schools of theology and religion—the highest wisdom and moral truth,—in the region of the highest civilisation,—in Christendom.

The most approved authority on Aristotle's Logic, at Oxford, thus speaks of him and of his work:

“Primus mortalium Aristoteles certum logicæ finem constituit, precepta in ordinem redegit, singulari artificio integræ artis methodum contexuit. Quam invenit

logicam, tam feliciter perfecit, ut in hunc usque diem, per annos circiter bis mille, perpetuis clarissimorum virorum studiis exulta, nihil prorsus acceperit incrementi." Aldrich.

Du Val thus extols and exalts the merits and use of his Categories :--

"Ardua est et gravis doctrina categoriarum, magnique usus et momenti, non ad logicam tantum, sed et metaphysicam, omnesque philosophiæ partes, quæ de ente universim, vel de partibus entis disserunt; sunt enim categoriæ veluti quædam familiæ, classes et ordines entis, seu compendia rerum omnium, certa ratione dispositarum, unde disserendi amplissima materies petitur, et ipsa scientiarum objecta tanquam e locupletissimo penu depromuntur." —Du Val, Synop. in Aristot., p. 58. (Ap. Tatham's Chart of Truth, vol. i. p. 329 n.)

The following is another eulogy by the same, of Aristotle's Logic as a whole:—which, in quoting it, Dr. Tatham introduces with this remark, "The zeal of these devotees may probably entertain the reader."

"Est ergo ars, sive scientia, bene disserendi, ante alias omnes philosophiæ partes accersenda, sine cujus auspiciis nihil certo sciri recteque intelligi potest. Hinc enim ars artium, scientia scientiarum dicta est; non quasi sit scientiarum princeps, et præstantissima (hic enim uni theologiæ, id est, metaphysicæ, debetur), sed, quod ad omnes sit necessaria, ideo accommodatius dicitur organum organorum, instrumentum instrumentorum; ancilla, clavis, janua, spes, testa, murus philosophiæ, docendi vero discendique magistra, veri falsique disceptatrix et judex; arbitra etiam methodorum, definitionum, syllogismorum, Pegasi ungula, Silenus Alci-

biadis, plus habens in recessu quam in fore, lima ingeniorum, cos veritatis, ars disputandi, scientia rationis oratione conclusæ, denique rationalis, sive logica dissertatrix, sive dialectica.”—Du Val, *Synops. Analys. Doct. Peripat.* (Ap. eund., vol. i. p. 361—2, n.)

And the statutes of the University of Oxford—the chief seat of Christian education,—put Aristotle in authority, and make it a penal act to question his infallibility, by statute. See *Stat. Univ. Oxon.*, Tit. 6, sect. ii, § 9. (Ap. Tatham’s *Chart of Truth*, vol. i. p. 366, n.)

But modern learning and wisdom have laid siege to and undermined this infallibility, though they have not yet succeeded in shaking this stronghold of heathenism, much less in making it fall.

Bacon made one of the first and heaviest assaults upon it. But though he opened a breach and erected a counter-fortress against it, which has been garrisoned since by the scientific world, and much frequented, it has never yet been of force enough to accomplish the ruin of its rival. The salvoes of Bacon’s artillery will be found in his *Novum Organum*; his *De Augment. Scient.*, &c.

Dr. Reid, Dugald Stuart, Browne, Campbell, no less strongly protest the futility and falseness of Aristotle’s system.*

Thus I might have rested upon the authority of such eminent men, and proceeded to the exposition of my system of Logic, without attempting to add anything to the grounds of their refutation and condemnation. But the work has not yet been done. And it

* See the references, Tatham’s *Chart of Truth*, vol. i. p. 321. Note by the Editor.

ought to be done. And new demonstrations may have effect at last, where others have failed. And the general mind is more open to conviction at one season than at another. And this is the season when great changes of opinion are being made; and must be made; and are being made to the greatest purpose.

Aristotle pronounces a condemnation of his own Logical system, both by the puerilities of the examples which he himself uses to illustrate his scheme; and by the non-use of his own instrument in any of his philosophical works;—and again by the false conclusions which he arrives at when he employs his principles of Logic upon important questions, moral or physical.

“The slow progress of useful knowledge during the many ages in which the syllogistic art was most highly cultivated, as the only guide to science, and its quick progress since that art was disused, suggest a presumption against it; and the presumption is strengthened by the *puerility* of the examples which have been always brought to illustrate its rules.”—(Dr. Reid’s Appendix to vol. iii. of Lord Kaims’s Sketches.) Not to dwell upon the impotency of such notations as A. B. and C.; M. N. O. (mathematical representations of exactly defined ideas of forms and quantity) to signify moral propositions and qualities,—which are subject to modification and misapprehension in every degree, in every mind,—the following are of the nature of the illustrations which Aristotle uses:—

Man is an animal: man is white: Socrates was wise: Cleon brave: Miccalus a poet. One of the largest ideas and premisses he proposes is, “Every long-lived animal is void of bile.”—And this is only in

physiology and physics; and is wrong: as most of what he uses as principles are.

The following are examples of the puerility of the illustrations given of syllogism, by its votaries and admirers,—to be met with in Owen's Translation of Aristotle's Organon, in a note to chap. 38 of the Prior Analytics.

Of good there is science that is good.

Justice is good :

Ergo, Of Justice there is science that is good.

Every being is an object of science :

Good is being :

Ergo, Good is an object of science.

Of being there is science, that it is being :

Good is being :

Ergo, Of Good there is science, that it is being.

With regard to his non-use of his own system, "It may be here observed once for all, that in those of his works which have come down to us, he never uses the formal syllogism, but conveys his meaning in a style pure, concise, nervous, and elegant, though often obscure. And thus the practice of its author is so far a contradiction, and no inconsiderable objection to the logic which he prescribed." (Dr. Tatham, Chart and Scale of Truth, vol. i. Appx. 351-2.)

And by way of example of the erroneous conclusions which his Logic led him into,—Thus he concludes by means of his own rule of contraries or opposites: "For example," he says, "if it be right to do good to our friends, it is also right to do evil to our enemies: for the opposite to doing good to our friends is the doing ill to our enemies." (Top. lib. i. cap. 14.) See this

favourite rule of contraries further illustrated by the same example,—Top. lib. ii. cap. 7.

This in morals. But it is notorious that he was equally unsuccessful, and far from true conclusions, in physics; for he concluded that the sun went round the earth, contrary to the knowledge of the Egyptians and Pythagoreans: who held that the earth revolved upon its centre. And Aristotle constantly demonstrated that the human race and the world had no beginning, for that every man according to experience has had a father; and in the same way the world must have existed from eternity, and could not be created out of nothing.

There can be no doubt that Aristotle would have equally concluded that Jesus Christ must have been born in sin, nay, have been sinful; and been born of a human father.

How can it be right to found our systems of reasoning upon the school of such a philosopher; or how could it be that our nurseries of theology and religion should dispense such a diet to their *élèves* in religious knowledge and divine wisdom, without engendering error and false religion in their minds; or how could we wonder to see sceptical doubts and difficulties started and entertained, and verbal doctrines and outside worship held to be essential, and withal a general want of faith and spirituality, and that religion should become a philosophy and a dogma, when this must be the necessary growth of such a tillage and watering! Independently of Aristotle's Logic being suited to science and physics, and little applicable, if at all, to morals and human life, it is erroneous, as we have seen, when applied

to both subjects. And we shall show presently that it is not strictly applicable to subjects even of the most material character.

It is true that our students in theology are not all enslaved to these trammels of their education, and that our universities do produce and send forth men of faith and spiritual discernment. But then it is by freeing themselves from the fetters in which they have been trained to walk, and exercising freely the faculties of reasoning and good sense, and the methods which nature and experience dictate,—as Aristotle himself did in all the masterly productions of his own powerful mind. It is necessary that this better system should not only be used but acknowledged, and its superiority professed,—and the danger and falseness of the other pointed out and taught in our schools, before we can hope for a forward and effectual progress in religious knowledge and wisdom.

I will end this introduction by a quotation from De Croy's *Three Conformities, or the Harmony of the Romish Church with Gentilism, Judaism, and Ancient Ceremonies*.*

“What is more sacred among sciences than divinity? You have profaned it, by bringing in of that which you term scholastic, gathered out of Lombard, Master of the Sentences; which has engendered to us the race of Thomists, Scotists, Albertists, Occamists, Realists, Nominalists, and such others, whose foundations are laid upon the subtleties of Aristotle. Let any men remark

* W. Hart, London, 1620, 4to; translated from the French. Of which Dr. Tatham's Editor says, the only copy he had met with was in the library of Sion College.

the themes of your sermons, the disputations of your schools, together with those great and huge volumes of commentaries upon the four books of the Sentences. Oracles are received everywhere from the *Tripus* of this philosopher; and the universities, which ought to be instituted after a Christian manner, are changed into academies of that heathenish Athens. You spend more time in clearing that which seemeth ambiguous and doubtful in the doctrine of that ingrate disciple towards Plato, than in teaching your flock the law of the Gospel. The oaths which the universities do exact of their initiates and bachelors, that they shall not control him, are witnesses of the truth of what I speak.”*

Our universities do not now actually recommend the study of Thomas Aquinas, Scotus, and Peter Lombard; but there is still much of the same spirit as was in these doctors in their system and their hearts, if even warm students of these scholastic theologians be not to be found among them; and the retention of the statute alluded to still expresses the cordial leaning and disposition of their minds.

We will now proceed to analyse and elucidate still farther the real nature and place of syllogism, and syllogistic and inductive reasoning, as now propounded and professed, and endeavour to show what place they properly hold in all reasoning; and especially in respect to moral and religious reasoning and inquiry.

* De Croy's First Conformity, Chap. III. (Quoted from Tatham's Chart of Truth, vol. i. p. 344, note).

CHAPTER II.

ARISTOTLE'S LOGIC.

WHEN I speak of Aristotle, I speak of the schools of our universities which have doted on and deified him. When I speak of Aristotle's Logic, I speak of the miserable extract and epitome which the schoolmen have set forth as the model and marrow of it, and taught to their students as the best foundation and standard of reasoning, in theology, as well as all other philosophy and inquiry. Aristotle himself, there is reason to believe, would not have arrogated to his whole work, the sufficiency which it is supposed to have to deal with the great subjects of present inquiry and reasoning, much less to this meagre compendium of it. Aristotle's great and penetrating mind foresaw the difficulties and objections to which his theory is liable. And he endeavours to grapple with them, and in a manner that makes it doubtful whether he had not his own misgivings as to the completeness of his system, and whether he did not think rather that his demonstrations were suitable and sufficient only to meet and confute the sophisms of the sophists of his own day.

The Schoolmen say that we can only reason in words: as for example, Max Müller says, "We cannot reason without language," (p. 435, part II. in his *Philosophy*

of Words.) Both Whately and Aldrich regard Language as the principal object of Logic. The former declares that "if any process of reasoning can take place in the mind without any employment of language, orally or mentally, such a process does not come within the province of the science here treated of."* From this Mansel dissents. Out of this opinion, and the habit of mind founded upon it, arise such arguments as these:—"If, in prophecy, one day means a year, 1000 years must mean 1000 times 365 days." "If the second Resurrection is real, the first Resurrection cannot be figurative:" (Moses Stuart.) "The same type or figure must always mean the same thing." "A late writer (Dr. Chalmers) contends that 'The examination of the Scriptures is a pure work of grammatical analysis. It is an unmixed question of language.' 'We admit of no other instrument than the vocabulary and the lexicon.' 'The mind or meaning of an author who is translated is purely a question of language, and should be decided upon no other principles than those of grammar and philology.' 'But this principle has been most glaringly departed from in the case of the Bible. The meaning of its author instead of being made singly and entirely a question of grammar, has been made a question of metaphysics or sentiment; . . . it has been, such must be the rendering from the analogy of faith, the reason of the thing, the character of the divine mind, &c., &c.' " (Taken from Andrew Norton's Reasons, pp. 98, 99, 100, note. And then A. Norton clearly shows the absurdity of all this.)

* Quoted from Aristotle's Organon, by Owen, Bohn's Edit., Vol. I. p. 267, note.

But Aristotle himself says that "demonstration does not belong to external speech, but to what is in the soul or mind; neither does syllogism."* Aristotle could see,—who does not see?—that our best and finest reasonings are purely mental. What has our judgment of a person's character, the interpretation of his motives and dispositions in a transaction, to do with words? What, our opinion of the weather, whether it will rain or shine? What, the discovery of an enemy's plan and designs by a general commanding in a battle,—and the counter movements by himself? What, the governing our act in temper or temptation: giving most weight to the good or the bad motive? All these are instances in the most important concerns of life, and all these are processes of Reasoning. All these are governed by undescribed impressions, intuitions, impulses of judgment. The use of these Aristotle himself admitted,—and called them *Eusebeia*. "Intuition—*eusebeia*—is a certain happy conjecture—as if a man seeing another talking to a rich person, should conclude that it is in order to borrow money of him." (Post. Analyt., bk. i. ch. 34.) These are fine, rapid and undefinable as thought. These cannot be expressed by language:—unless, as some have ventured to theorise, the mind itself is a vocabulary, and we can only think in words.

Aristotle saw that syllogism could not furnish demonstrative and certain proofs, otherwise than in certain excepted cases: as in Mathematics, and to some extent in physics. Therefore he added his Eight Books of the

* Posterior Analytics, Bk. i. chap. 10.

Topics of Probabilities,—the use of which he calls dialectic syllogism; in which he endeavours to show the greater probability and weight belonging to one kind of argument and illustration over another. With his vast and versatile and penetrating mind,—with a comprehension and labour which is almost superhuman, he examines and weighs the merits of five hundred different methods of argument; pointing out how they raise more or less reasonable or unreasonable probabilities. In this he goes infinitely deeper, and makes an incomparably wider and more applicable survey than the school logicians.

But his system stultifies itself by its elaborateness and abstruseness. None but a deep and devoted dialectician, as he calls him, could use it. It might be used by way of an analytical exercise for the mind,—to sharpen the wit, teaching it to fence, and how to parry and thrust in argument. And this he seems to propose as its chief use. His treatise, he says, is useful for three purposes: for exercise, conversation, and philosophical science. On the first two, both which may be summed up in the word “argument,” he has much illustration; on the last very little indeed. And these are almost the whole topic of his Eighth Book? But after all this ingenuity and labour he has made little or no progress towards the exact resolution of truth in any subjects; and he has not made any advance or excursion beyond the most trivial and inconsequential topics,—which do not properly arrogate to themselves for a moment the very name of Truth.—Propositions such as, that the definition of man is “a pedestrian biped:” that man is an animal: that such a thing is white or coloured: that such a thing is a cubit. (Topics, Bk. i. ch. 9.) That what is prior or more honourable is of the more worth:

as health than strength or beauty,—for the one is in the moist and dry and the hot and the cold, in short in those things whereof the animal consists, —both the others in things posterior; for strength is in the muscles and bones, and beauty seems to be only a certain symmetry of the limbs and members. That more is better than fewer: the useful at all or most times: the more illustrious: the more difficult, &c.; (Top. Bk. iii. ch. 1, 2.)

The following is one of his best examples of refutation of argument. “Xenocrates shows that a happy and a worthy life are the same, because a worthy and a happy are the most eligible of all lives: and the most eligible and the greatest are (necessarily) one thing. But he does not demonstrate (prove this),—for a happy and a worthy life are not one in number, so that it is not necessary that they should be the same; because both are most eligible, but one is under (contained in or the consequence of) the other.” (Top. Bk. vii. ch. 1.) And yet Aristotle's logical refutation is wrong: for a good and a happy life are one in a moral sense. And this shows, by an example, how the school Logic is unfitted for moral subjects and arguments. He propounds, indeed, one real example of a moral question, viz. whether when the laws and the command of a parent (he might have said, of God) disagree, we ought to follow the one or the other? But he does not give the slightest suggestion as to the mode in which it might be solved. (Topics, Bk. i. ch. 14.)

In like manner, when the comparative anatomist tells us that “certain jointed bones in the whale's paddle are the *same* bones which in the mole enable it to burrow,—which in the bat enable it to fly, and in man constitute his hand with all its wealth of functions,”

(Reign of Law, 33),—what can the school Logic teach us of this truth, but that it is no truth, but a mere ambiguity and metaphorical expression? It can refute, but cannot build up even physical truth,—when it ascends into the region of truth.

All that his system can do with similes and metaphors is to show that they are inexact,—are mere analogies. He cannot recognise, therefore, that analogy is the great foundation of truth.

In all his preferences of probabilities he can only say that one probability is greater than another. He cannot compare or weigh the degrees of probability,—on which all moral truth and action must be based. He cannot attempt to point out the means or grounds upon which may be raised a *moral certainty*.

One of the topics which he enforces and repeats is, that induction is suitable for common minds, is more calculated to persuade and clearer, but that syllogism is the proper instrument of the dialectician, is more cogent in disputation and efficacious. (Top. Bk. i., ch. 12. Bk. viii. ch. 2.)

Thus he shows that he separates himself from realities, and from moral truths, which found themselves upon experiences, examples, and analogies, and wholly immerses himself in principles,—that is, in axioms and opinions; which are indeed but the fashions of the day, however they may be those of the wisest and most in vogue of the philosophers of the generation. How all these opinions of antiquity have been dispelled and superseded is known to all. At all events, the axioms and opinions of the different schools were contradictory of each other.

Aristotle perceived that a universal proposition could not be proved by induction without begging the question. Therefore it is that he was forced to found his syllogistic system upon *assumed* principles: knowing that they could not be demonstrated. Some of his followers have seen and admitted the same thing. Taylor says, "The universal, which is the proper object of science, is not derived from particulars, since these are infinite, and every induction of them must be limited to a finite number. Hence the perception of the 'all' and the 'every' is only excited and not produced by induction." That is, they are conjectured, and rendered probable,—and therefrom and thenceforth assumed as certain. (Arist. Org., by O. F. Owen. Bohn's Ed. i. 286, note.) Therefore Aristotle says, "It is impossible to demonstrate the proper principles of each thing: for they will be the principles of all things, and the science (knowledge, ? assumption) of them the mistress of all sciences." (Post. Anal., Bk. i. ch. 9.) "And again, I call those principles in each genus (subject, branch) which it is impossible to demonstrate. What these primary things, and such as result from these, signify, is *assumed*; but as to principles we must *assume* that they are, but *demonstrate* the rest." (Ib. ch. x.) (See also Post. Analyt., Bk. ii. ch. 19, where he explains the same thing.)

Moreover, even in the only demonstrable science, mathematics, he says, that geometers do not assume or assert realities, or say that their figures exist; but that their subject is definitions; and that they "conclude nothing from the lines *being* so and so, and such as they call them, but they conclude those

things (results) which are manifested through these (symbols.)" (Ib. ch. 10.) That is, that the definitions and figures of the mathematicians are ideas only (and therefore single), as I have shown in my First Book, ch. 6.

Therefore it was that Aristotle, aiming at certainty in truth, was obliged to found his system upon principles, *i. e.* the assumption of principles. He saw that certain, that is, universal principles, could not be proved by induction, without first proving the question, and so rendering the syllogism, and all other argument unnecessary; and therefore he asserted and used axiomatic principles for the materials and subjects of his logic, though in the only subject in which he could perfectly apply and illustrate it (mathematics), he admitted that its definitions and data were only conventional ideas, and not realities. The consequence has been the misapplication and mischief of his mighty, laborious, and searching intellect, and his entire failure and aberration in theory and result. His principles have all crumbled to atoms, and proved to be false, or merely conjectural; and there were, even in his own time, and ever since, contradictory principles in different and successive schools, and utter uncertainty therefore and confusion.

If he had not been wedded to his own theory, and forced to assume and assert these principles in order to carry it out; and if, with a love of truth too humble for science, he had acknowledged to himself and the world that probabilities and preference were the utmost that could be arrived at in moral subjects and the science of human life,—he would have begun his

system at the other end, and founded it upon probabilities in argument,—and shown that certainty of proof, if it existed in any case, was only exceptional and in inferior subjects, and so inverted his theory and process, as I now hope to succeed in doing.

Aristotle recognises the employment of analogy, and cursorily glances at the use of it; but he can recognise it only to depreciate it.* He cannot recognise that in the shape of examples, similes, metaphors, experiences, parables, types,—all of which are only different forms of analogy,—it constitutes the whole foundation of moral sciences. Much less could he recognise religious belief as the subject of reasoning and logical investigation. But if Aristotle had had the opportunities of religious knowledge, and doctrines of faith and revelation, which we so abundantly have,—he would have been the first to reject his own system as empty and fallacious,—which we, Christian philosophers and trainers of youth, cannot;—and he, as Nineveh and Sodom, would rise up in judgment with these more highly blessed and privileged generations.

“ If that great philosopher had been blest with the privilege of beholding the glorious gospel shedding its rays over the Athenian provinces; or had he partaken, with the righteous Abraham, the distinguished favour of seeing, through type, vision, or scenical representation, that future day, in which its Divine Founder sealed with His blood its

* He is said to have reproached Democritus as a teacher and philosopher, because he dealt in similitudes and analogies, and did not define and dispute in form. Bacon, *de Augm. Scient.* lib. vi. c. 2; ap. Tatham's *Chart of Truth*, vol. i. p. 5.

immortal truth ; doubtless the patriarch and the philosopher would have rejoiced together. Instead of that absurd and unphilosophical use of his works, which has been made in almost every age by his servile followers ; in the enlargement of his vigorous and comprehensive mind, he would have discarded the definitions, the general propositions, and the formal syllogisms of his useless *Organon*, to embrace immediately this theologic principle, founded in the wisdom, and established on the veracity of God. Instead of disputing the stupendous mysteries resulting from this principle, or ever calling them in question, he would have placed them universally on the same divine inscrutable basis, and have exclaimed at once,—‘Lord, I believe ; help thou mine unbelief !’ Or had this virtuous native of Stagira been admitted with Paul of Tarsus to the humiliating spectacle of the various opposition, which his *Organon*, in the hands of men of narrow and contracted genius, enslaved by terms and stupified by forms, would occasion by its use and abuse to the truths of Christianity, or rather to their reception (for against them the gates of hell cannot prevail), and to the establishment of their immortal principle ; had he foreseen the great injury it would effect, in future times, on the wisdom which is from ‘above, which is first pure, and then peaceable ;’—by ‘ministering foolish questions,’ and fomenting rancorous disputations—the philosopher would have lamented with the apostle these profane mixtures of philosophy and vain deceit, and have laboured with him to guard mankind against them. Could he have heard certain sophists and syllogisers of the Athenian schools, ‘disputers of this world,’ insulting that great apostle with their ignorance and scorn—‘What will this babbler say ?’—could he have beheld his learned commentator Simplicius, under the full light of Christianity, confirming himself in infidelity, and exulting in opposition ; could he have seen the unhappy Porphyry,

perplexed and entangled in the subtleties of his Logic, and in the act of composing the *Isagoge*, abandoning his faith ;—could he have conjectured, that whilst it was raising human reason above itself by persuading it of its all-sufficient power, his hypothetical system would lead it from the most solid truths into the endless maze of speculative error, and that this wild infatuation would inflame the sanguine and promising genius of a youthful emperor, and cause him to apostatise from his religion ;—could his eye have reached down to these distant times, and have observed the cloud of ignorance and superstition, continuing to envelope the greater part of the Christian Church, which the evasive versatility of his Dialectic was calculated to thicken and confirm, rather than dispel ; or could he have seen that part, which boasts of reformation, still shackled in the pursuit of theologic truth by its sophisms and useless disputations, and by keeping men entangled, from age to age, in the thorny wilds of school-divinity—could he have foreseen these hurtful consequences—instead of committing this portion of his works to the care of the too-faithful Theophrastus, the master and the scholar would have sacrificed them together upon the sacred altar of truth. Above all, could he have read, in the Book of Life, that heavenly precept—‘Love your enemies,’—he would have expunged the contrary proposition, by which his Ethics are disgraced, as militating against every principle of humanity and sound religion. He would have improved, or abandoned his moral system, as superseded by one infinitely more perfect. His theology, in which he excelled all philosophers before him, if Plato be excepted, would thus have soared on a sublimer wing to the heaven at which it aimed ; whilst he would have been content to sit down as a little child at the feet of Him, ‘who spake as never man spake.’” (Tatham’s Chart and Scale of Truth, vol. ii. pp. 53–57).

CHAPTER III.

WHAT LOGIC IS.

It is the doctrine of the schools that Logic is merely a formal instrument, by the use of which conclusions are drawn; and new truths are arrived at, from truths already known or admitted,—by the technical use and application of certain formulæ.

It is the dogma of philosophers in Logic, that anything beyond strict formal deduction,—or deductions which may be reduced to form,—that all metaphors, similes, &c.,—that everything that enlists the imagination,—are foreign to Logic, and ought to be excluded:—that these are instruments of rhetoric;—but that all rhetoric is fallacy:—that it may be admitted as an instrument of persuasion, but that it cannot be a legitimate means of promoting truth. In effect, that rhetoric is not a branch of Logic, but opposed to it; and that persuasion cannot be legitimate argument.

In all this I consider that there is a total misapprehension of the nature of Logic; of the nature of argument; and of the nature of truth.

But as I care little for mere definition of words, and would not wish to confound Rhetoric and Logic together as if they were one and the same thing, I am content to say that Rhetoric is an instrument of rea-

soning in moral subjects, and in matters relating to human action; and that Logic is the instrument of proof in material subjects,—and if there are any others which can be brought to the same criterion, and subjected to the same formal tests.

If Logic is Reasoning, then Rhetoric in this view is a branch of Logic. If Logic is not reasoning, but only the application of a formal mechanical instrument, not requiring any exercise of the reasoning faculty, then let it retire, and keep itself to its own domain, and concede the province of reasoning to Rhetoric and its associates, and limit its pretensions to the mechanical application of rule to material subjects. If it says, that this use of, and deduction from, mechanical form, is an exercise of the reasoning faculty, then I will say that my system,—call it Logic or Rhetoric,—advocates and demonstrates the use, not of the reasoning faculty, but of the reasoning *faculties*.

And with regard to truth, such philosophers do not know what truth is. If they imagine that truth includes only those things which can be demonstrated by mathematical argument and syllogism, then I say they must give the world a new word for such conclusions as, That there is a God:—there is another world:—there will be reward for the good and bad:—that men are influenced by the Holy Spirit:—that the proud will be debased and the humble exalted:—that the blessing of the Lord it maketh rich:—that the consistent believer hath a continual peace. Such questions as, Whether animal and vegetable species are produced by development?—whether diseases are epidemic or contagious?—whether virtues and vices are by inherit-

ance or habit?—whether Moses wrote the Pentateuch? what is prophetic inspiration?—did the Prophets prophesy of more than they understood?—is mesmerism a supernatural influence?—can miracles exist?—is there anything that is supernatural?—Are not these also subjects of truth and error? If so, truth has a much larger field than the logicians would seem to assign to it. Must it not include every matter of probability? It may not be contended that probabilities are not the subject of Logic; for every conclusion which is not certain (*logicé*, in necessary matter), is, or may be probable (*logicé*, in probable matter). And a large branch of Aristotle's Logic was his topics of probabilities. There is belief as well as knowledge. All the business of life,—the dearest interests of mankind, are founded upon belief. We believe in God; we believe in rewards; we believe in our banker's credit; that a medicine will cure; that our bread is of wholesome wheat; we believe in our parentage; we believe our house or lock is safe; that our ship is safely insured; that our venture will yield a profit; that the sky or wind will bring sunshine or rain; that honesty is good policy.

Surely there must be a reasoning suited to the belief of what is probable, as well as to the knowledge of what is certain:—for determining *degrees* of probability. Whereas, in syllogistic reasoning all probability is of the same degree; all conclusions are that a thing is certain, or is probable; or certainly is not,—or is not shown to be probable. It cannot even show that it is probably not: that it is not likely.

And “probability,” that is, degree of probability, as Bishop Butler says, is in us the guide of life.

It is a much more serious and reasonable question, whether anything that can be made certain (that is, more than morally certain) is the subject of Logic at all: that is, of the exercise of the reasoning power. I say that it is not. It is only a subject of the perceptive power. Aristotle illustrates his syllogistic system by A. B. and C., &c. And this has created the opinion that mathematical demonstration is performed by syllogistic reasoning. But the fact is, that the mathematical generalisations which are supposed to form the major premisses of the syllogisms, are not realities, but ideas; and as such are no generalisations of numerous realities, but are the expression each of them only of *one* idea,—of *one* assertion or condition therefore. For the idea is one.* The assertion or supposition, Every triangle having two sides and the included angle equal:—Every triangle standing on the same base and between the same parallels:—Every circle having the same radius:—the angles at the base of an isosceles triangle,—these are each only an idea: only one single idea. There is no such thing as a real perfect circle. There is no such real thing as a perfect isosceles triangle,—as a perfect equilateral triangle:—as any perfect triangle whatever. As used in mathematics, they are each a mere idea conceived and supposed; and as such actually one and the same. That it is an idea and not a reality is proved by the rude manner,—no matter how imperfect and rude, it equally well serves the purpose—

* See Book i. chap. 6.

in which this idea is represented on paper by the figure or diagram. The demonstration is applied to this one idea, thus rudely represented, in each or any one case assumed; and this same case and idea is assumed again whenever the demonstration is referred to afterwards for use in another comparison or identification. It is a convenient mode of using this previous demonstration in regard to the idea, to put it into the form of a generalisation; and to say, that all such circles,—all such triangles——.

But if any one cannot see or admit the ideality and therefore oneness of every mathematical proposition, because of the fluxional variety of form and size which it may seem to assume,—then it only falls under the necessary condition of every universal proposition, viz., that it can only be known to be true by reason of every particular instance which it embraces having been proved. In which case the conclusion, which is only one of the particulars, has also been proved with the rest:—For, that all men have teeth, and therefore that such a man had teeth,—that all men have died,—all men have come of one father,—are not true and proved, if ever there was a single man who had not teeth,—or one man who did not die,—or if one pre-Adamite skeleton has been found;—and therefore to prove the major with certainty, the particular conclusion must have been proved among the rest; and might just as well, and much more easily, have been proved by itself, than by going through all the round-about proofs of all the several instances, of which the conclusion itself is one. If it be further answered, that the major proposition in a syllogistic reasoning is given or laid down by

authority, not known and understood by the reasoner, then there is no real reasoning in syllogism, no room for judgment:—it is a mere mechanical process; and does not deal at all with truth, and man's wisdom.

This is the necessary invalidity of all syllogistic proof in universal or necessary matter, *i. e.*, matters of certainty: as I have shown in the First Book of this treatise. And a single example or instance unproved reduces the conclusion by syllogism to a probability:—and all the syllogistic forms in the world can never show the *degree of probability*:—as I have also shown in my First Book. And all exercise of reasoning, and of the faculty of judgment, is upon matters of probability;—and such are all human affairs and subjects of action;—and therefore the syllogistic process, though convenient in use for the bringing forward and enunciating the grounds of argument and persuasion,—is utterly inadequate, by virtue of its forms, to deduce the *degree of probability*: which varies in amount from the barest possibility to the highest moral certainty:—and is the whole question:—and is everything.

In fact, it is only an argumentative and rhetorical form.

There must be some other instruments therefore applicable to the demonstration of moral truth,—truth in human affairs and action: which is the only thing which justly and philosophically deserves and bears the name of truth;—and among these I undertake to show are similes, and metaphors, and those materials which give exercise and occasion for the use of the imagination, and other excursive faculties.

Whether therefore it is Logic, or whether Rhetoric,

we propose to show that the reasoning power embraces far more than mere understanding and perception ; and uses a far greater number of materials than simple experiments and experiences and definitions : among which are similes and metaphors, apologues and analogies :—and I purpose to show the principle upon which this depends, and how it comes to be so.

SECT. 2. SIMILES AND METAPHORS.

It might well be supposed, *à priori*, that Reasoning, the highest work of Man, should call into exercise and require the employment of all the mental faculties of man :—the whole man.

I am not undertaking here to show the whole range of reasoning, through all the various powers of the mind. Such a work in completeness of detail is far beyond anything which has yet been or could be attempted ; though Aristotle seems to have conceived such an ambition. It is sufficient for me at this present, to show that reasoning legitimately embraces and enlists far different instruments and powers than those which have been attributed to it. This I shall chiefly instance at present in the use of similes and metaphors ; though other operations may be incidentally touched upon. And this will sufficiently prove that the philosophy of reasoning has been narrow, shallow, and mistaken ; and being so, as a necessary consequence, that the sphere of knowledge, which has been subjected to this inadequate and impotent test, has been limited

and lowered, and fettered with bands of matter and mechanism, and sceptically contracted.

Is it to be said that such similes as the following are not in the way of reasoning? "Go to the ant, thou sluggard, consider her ways and be wise." "So work the honey-bees: creatures that by a rule of nature teach the act of order to a peopled kingdom." The corn of wheat sown, decomposing, and springing up again to life,—the Larva, Pupa, and Imago,—as evidences of a resurrection. "No man lighteth a candle and putteth it under a bushel." "If a tree bear fruit, he pruneth it." *The Pilgrim's Progress*. "Worldliness is like a bubble: which reflects the heavens and all the rainbow hues, and then vanishes." "Worldliness is a circle." "The worldly man is like one on a treadmill; he is always climbing, and never gets any higher." "As a blind man ignominiously led by a dog, is dishonoured and degraded, so is the unbeliever who is led by his animal passions:" a simile of Mr. Spurgeon's. And as Paley said, A watch required an inventor and a maker, therefore the universe must have had a Creator.

It is not necessary to insist that all these are good arguments. It would, however, be very unnatural and obstinate to deny that they were argumentative. And is not that which is argumentative an argument? If, however, any one of the above similes has in it anything of the nature of just reasoning, our first point is established. And the first ground being gained, all

the rest is comparatively easy. But we must make our advances and proceed to it by steps.

SECT. 3. THE USE OF REASONING.

It behoves us first to satisfy ourselves and agree what are the subjects of reasoning, and the proper objects of argument ; for we cannot arrive at an agreement in what are useful and legitimate instruments, till we have come to an understanding what are the objects and ends to be accomplished.

Mathematicians, astronomers, and algebraists, wish to arrive at a demonstration what figures or quantities are equal ; what movements, positions, and perturbations, certain forces, under fixed laws and ascertained conditions, will invariably produce. These, I have already said, are not the proper subjects of reasoning. They are the subject only of the perceptive faculty. They are not the subject of argument. They call forth and require no exercise of the judgment. They are not the proper subjects of the reasoning powers, and highest human faculties. Men of weakest minds have been miracles of memory, and prodigies of power in arithmetical calculation. These subjects I dismiss wholly, as unworthy of the name and department of reasoning.

But the objects of reasoning are, first, to show the possibility of that which before was thought impossible. Another step is to show the likelihood : the lowest stage, perhaps, of probability. Next, every stage and step from the lowest to the highest probability :—and so on to the highest degree of moral certainty.

But persuasion is not only to belief, but to action ; and to action of all kinds ; to prudent, wise, and politic action ; to self-denying, and to virtuous action ; to compassion, liberality ; to love, sympathy, and admiration. And not only to action, but to non-action ; to caution, distrust ; to disapprobation, and abhorrence ; to endurance, fortitude ; to heroism, to enthusiasm. In moral action the will is to be impelled ; and this must be done by reasoning and by argument.

“ The Roman Catholic Cemetery (at Milan) is filled with graves, almost all of which have a cross. The sepulchral monuments are engraved with various Christian symbols, such as the palm, the fish, the chrysalis, and butterfly ; a cross resting on an anchor, a ripe ear of corn.

“ The Protestant burial-ground presents an unfavourable contrast to this, in the coldness and baldness of its features : no crosses, nothing that appeals to the imagination, or ministers hope and comfort by suggestion of natural analogies.”—(Dr. Wordsworth’s Tour in Italy.)

Even hope and comfort are of important and necessary use in human life and intercourse ; and these ends, it seems, may be promoted by the persuasive influence of analogies, and the enlisting of the fancy and imagination : which to this intent are reasoning faculties. To all these several ends reasoning must be adapted. And it might necessarily be expected that the means and instruments should, in some respects at least, be varied also, in correspondence to this variety.

A resurrection being the question, the grain of wheat, and all seeds, the larva, pupa, and winged butterfly, seem to evidence a possibility. Sleep and waking,

winter and spring, and all the other multiplied renovations, carry it further on to a probability. The ant and the bee are persuasives to action. The spider, the beaver, the bird building its nest, are incentives to art and wisdom. The lamb, and the little child, dispose us to the approval of gentleness and meekness. The lion, the dog, the fox, the serpent, create in us abhorrence against violence, churlishness, and cunning, slyness and subtlety. The gaudy vanity of the peacock shows to us the ridiculousness of vaingloriousness. The patient labour of the ox teaches us endurance. The self-mortifying training of the athlete persuades us to self-control and fortitude in our Christian course. The close pruning of the bearing fruit-tree disposes us as to cheerful submission under the trials and distresses which disappoint and would discourage our proficiency in holiness.

Distinct image and vivid impression are of infinite importance and effect in directing the mind and influencing the motives. And these are produced by similes and types. Instances are furnished in the rock and spring in Horeb; the serpent of brass; the Sun of Righteousness.

SECT. 4. ANALOGY.

It may be objected that some of these are analogies and not similes; that some of them are examples; and that examples of course are arguments: for they are the foundation of general propositions, and as such build up and form the major premiss in syllogisms. But I contend that examples, analogies, similes, and

metaphors, are all alike in their nature and use. I shall illustrate the fact only in this section ; the reason and principle of it, which makes them so, I shall keep for another step in our demonstration, where it will come in more properly in the order and completion of our development.

If I say Jeanne, Marie, Louise, Antoinette, all the first few ladies that I have seen, in France, are spirituelles,—therefore I affirm that most French women are lively and animated : this is example. If I observe that Saxons have high foreheads for the most part : these are examples. At Jude 9, when Michael the Archangel contending with Satan did not rail against him : this, says Cornelius à Lapide, is *argumentum ab exemplo*. If I notice that animals in general have retiring foreheads, and those of the weakest intelligence the most so, and so conclude that men of low foreheads will be weak-minded : this is by analogy. If I commend and recommend the examples of the bee, the ant, the spider, the beaver : these are analogies. The docility of the child, and that of the lamb, are both analogies. “They grin like a dog,”—“they are like roaring and devouring lions,” are both analogies and similes. “Where the carcass is the eagles will be gathered,” is both an analogy, a simile, and a metaphor. “Every valley shall be exalted and every mountain shall be laid low,” expresses and teaches directly the doctrine, “Every one that exalteth himself shall be abased, and he that humbleth himself shall be exalted.” Thus also we call, with commendation and recommendation, a wise man a light, the saints stars, worldliness a circle and a bubble, Christian knowledge a pearl, the word of God seed, an

unbelieving man blind, the universe a machine. It is evident that all such expressions and ideas are used argumentatively, and without distinction, either as examples, analogies, similes, or metaphors. But they are apt to take one name and form rather than the other, according as they are more or less closely allied in their nature to the subject to which they are applied. It is plain that as no two things are the same,—which are in reality, and not in idea,—that no example ever is more than a close analogy; for no one man or mind is exactly the same as another. I do not allude any longer to the material world, and the laws of matter, and physics, and mathematics; but dismiss them now and altogether as wholly unworthy of, and unconnected with, our great subject,—the real use of the faculty of reasoning.

SECT. 5. USE OF SIMILE, ANALOGY, APOLOGUE.

WE are now come to the exemplification of the use of similes, and their application to the different purposes of argument.

We have already seen that in matters quite beyond our experience,—the germinating of the buried seed, the new and winged life of the butterfly, the re-wakening of nature from the death of winter, and of the mind from sleep,—all to a renewed and more vigorous animation, furnish a token of resurrection, and a belief of the possibility of it:—Possibility. The wind bloweth, but thou canst not see it,—so the Holy Spirit, though unseen, may move and influence us: is an answer to Nicodemus, who said, “How can this be?”

The powers and dispositions of animals occasion a probable expectation of similar dispositions in men whose skulls and countenances approach to the same configuration:—Probability.

The contrivance and mechanism of the universe produce an entire conviction of the necessity of a Creator:—Moral certainty.

The bee, the beaver, the ant, are analogy of example disposing to action, and diligence in business. A man is not crowned unless he strive, is analogy of worldly policy Persuasive to energy in our spiritual course.

The Pilgrim's Progress is apologue persuasive to fortitude and perseverance in our Christian journey and pilgrimage.

The lamb, and the dove, and the ox, are analogies from animal instincts, disposing to Christian dispositions in beings endowed with souls and reason.

The serpent, the fox, the wolf, are like analogies, disposing to hatred and avoidance in the same intelligencies.

“No man lighteth a candle and hideth it,” is a direct moral and practical analogy from prudential to religious affairs.

Some similes are mere apt illustrations for the sake of vivid impression and apprehension: as, that worldliness is a bubble; a blind man led by a dog is like the unbelieving man led by his animal passions; he who spends all his time in sports is like one who wears nothing but fringes, and eats nothing but sauces.

As some are dissuasives, so some are dissimiles: as, the lamp requires a man and a match to light it, but the Gospel lights itself.

Some are natural existing types in creation and the universe: as, the Sun of Righteousness, giving heat and light and life to all existences; the moon, the Church, waxing and waning, and reflecting that light; the stars, the saints; the clouds, preachers, pouring down the rain and dew of doctrine; mountains, the proud; valleys, the lowly; the seas, the agitated, unstable world of sin and unbelief; the land, the Church of God; the green grass and trees, His teachable and growing children.

And there are ordained types and typical occurrences: as the death of Abel; the offering of Isaac; the exodus from Egypt and its plagues; the taking of Jericho and Jerusalem; the ordinances of the Tabernacle and Temple; the history of Joseph; the victory over Goliath; the rock at Horeb; the brazen serpent; the ascension and intercession of Moses; the healing of Naaman; the resurrection of Jonah.

There are also typical parables: as of the unjust steward, who gave indulgences to his lord's debtors, telling them to write fifty and fourscore.

There are also false as well as just uses of similes and types: as when the two swords which Peter showed are said to typify the two powers, the temporal and spiritual authority of the Church.

And here I may conveniently answer the objection, that similes may be used falsely, for error as well as for truth, and are therefore fallacious, and no instrument of legitimate argument: To which I answer, "What real and useful form is there of which there is not a counterfeit?" There are false religions and false gods; there are false revelations and false prophets; there are coun-

terfeit coins, and beggars who are impostors; there are imitation gold and silver, and pearls and precious stones; there are actors of every character and passion, on the stage, and in the common walks of life. All these counterfeits, it is well known, only prove the existence of the thing counterfeited; for there is no imitation without a reality to be imitated. A fallacy may be accepted by a false taste, and deceive a shallow or perverted mind. Even the best grounded may at first be deceived. But true and just analogies are predominant, and consistent, and support one another, and thus produce the most permanent impressions; and thus truth is always strongest, and prevails at last: though it may be out of a tumultuous and wavering conflict, after many retreats and advances, in the turmoil and strife of energy and advantage, and talent and ingenuity.

SECT. 6. THE JUDGMENT.

ONE true analogy supports and confirms another. And this is *judgment*. One example and analogy agrees with, or counteracts, or corrects another; and scores and hundreds of these interweave, and lie parallel, and give cautionary warnings, and create qualifying impressions, till the reasoning and reflective powers are exercised and tutored by habit to feel and recognise the right direction they should take, and the path that they should walk in, in making any further discoveries or recognitions. And this is Judgment.

Moreover, the mind has a power of collecting general truths from a bundle of experiences. And so fine is the

instrument, so real is the faculty, so high above everything that we conceive from our experience of mechanical arrangement, or of objects of the outward senses and movements, that the mind can dismiss all recollection of the experiences which it has received, the objects, facts, analogies and arguments, and form for itself a storehouse of truths, axioms, proverbs, and principles,—which it uses without recalling the experiences on which they are founded. It, at the same time, and to a greater extent, retains impressions only, a current of thought and belief, a disposition, a habit, which enables us to recognise truth and feel it, with a fine and delicate tact, nice discernment, and prompt intuition, without definite recollection of reasons, and comparison of circumstances, and weighing of experiences. This is Judgment.

The former are more mechanical, coarse, and rude : tending to become stores of words more than of ideas : fitter therefore for purposes of argument than of thinking and determining, and laying the foundation for the theory of syllogism. As these are never accurate, and are often contradictory : as, “He that is not against us is with us ;” and “He that is not with us is against us :” “Answer a fool according to his folly”—“Answer not a fool according to his folly”—therefore they require to be recollected and used with reference to the experiences from which they were drawn, and to be estimated and applied with the same fine tact, according as the subject rises higher into human life and conduct, moral action, and religious duty and belief.

One analogy suggests another, and one experience opens this storehouse of all the experiences and analogies which the mind has treasured up ; and thus puts

in motion the judgment. Thus Miller's theory, that nations are advantaged and invigorated by a hostile neighbour, calls into use all our historical recollections; it reminds us of the athlete who continually strengthens himself by conflicts with his trainer; of the muscles of the body and the faculties of the mind being improved by exercise; and so forth.

In the argument, "If a son ask bread, will he give him a stone? if a fish, will he give a serpent?" what a storehouse of analogies is opened to convince us of the conclusion.—1. All the universe is analogous: 2. God and Man are analogous: 3. The attributes of God are analogous to the good dispositions of Man: God has the relation and affection to us of a Father, &c.

This is no argument to one to whom God is a cruel and vindictive spirit.

Thus the judgment is made up of all the experiences and analogies which the observation has collected and treasured up. A good judgment is made up of true and just analogies; a bad judgment, of false analogies.

The judgment then is made up of principles, impressions, habits of thought, which are derived from generalisations of experiences; which abide and act, and have a real instrumental existence, after the experiences themselves are forgotten. These constitute the elements of the reasoning power; the materials with which the judgment is built up. And no one can tell how numerous and intricate these elements may be, or analyse the working or composition of them. No one can analyse these elements into their parts or atoms; or tell how far the elements of these elements may be themselves compounded. Recent analysis has discovered

the existence of compound elements even in the mere physical operation of chemistry. It has ascertained that primary elements may enter into combination with other primary elements, and that the compound may become as it were a new primary element; exhibiting and exerting its new independent character in compounding itself with other elements, and so becoming the basis of higher combinations and organisations. Thus compound mineral and inorganic elements may become the materials of vegetable organisations. And the compound elements of vegetable organisation may become the basis of animal organisations. And compound elements of animal organisation may become the means and materials of higher human organisations. And no one can tell how far forward, or how far backward, this compound of combinations, or this analysis of compound elements, may be carried. And if this is the case in the low stages of physical, and vegetable, and animal composition,—what may it not be supposed to be in the organisation of the mind, and the forming and exercise of that highest power of sublunary creation—the Reasoning and Judging Faculty? Truly it puts into shade and turns into darkness and oblivion that feeble rushlight of reasoning, the Logic of the schoolroom.

SECT. 7. ANALOGY REAL AND UNIVERSAL.

BUT I have spoken of analogies as real. And the whole question is, whether they have any existence in the nature of things; or, whether they are only accidental, artificial, and the creations of lively thought, imagination, and ingenuity.

There are many coincidences which are merely apt and ingenious; and these are the tools and weapons of wit, in trifling things and amusements. In serious matters they have only the effect of arresting and riveting attention, and creating lively and more durable impression.

But it is demonstrable that there is a concatenation and interweaving of analogies throughout all nature, material and organised,—vegetable and animal, moral and religious, human and divine,—which links all its parts together in family likenesses and relations, and causes every single phenomenon or form or operation to be illustrative of some others, or of every other. It may have been the perception of this principle which gave occasion to the theory among the ancient philosophers of the harmony of the spheres.

This occasions that the Bible, which is the most perfect expression of truth in the relation of the universe, and all its existences, to Man, who is the centre, and object, and highest intelligence in this world of sense, speaks throughout in the form of simile and metaphor, and type and parable: that is, of analogy.

Light and darkness are types of good and evil from the beginning. Heaven and Earth have the relation of the ruling governments and their subjects. The sea and land are the troubled, unstable world, and the firm footing and refuge of religion. The clean and unclean animals are natural types of the pure and impure in moral conduct. The wild beasts figure the lawless and cruel; the domestic, the gentle and amiable. Therefore it is said of the time when all evil passions shall be tamed, “the wolf shall dwell with the lamb, the leopard shall lie down with the kid, and the lion shall eat straw like the ox.”

Man, the last of all created, is in God's image and likeness; and God reveals Himself as Man, exalting and perfecting His nature into Himself; and Man-God and God-man are one,—the central pattern and exemplar of the whole universe.

The sun, moon, and stars, are emblems of religious light and influence:—the sun, of the divine manifestation; the moon, of that light reflected by His Church, waxing and waning in changeable incompleteness; the stars, of the saints. Hence Jacob blesses his sons, the twelve patriarchs, under the similitudes of the twelve signs of the zodiac.

The perfect metals and precious stones represent virtues. Hence the prophecy says, "For brass I will bring gold, for iron I will bring silver."

The myrtle, the pine-tree, the olive-tree, the vine, are approved among plants, the rose and lily among flowers, as the sweet-tempered, the upright, the peaceable, the fruitful, the amiable and pure are among men. Clouds pour down the rain of doctrine which makes our souls fruitful; thunder launches spiritual threatenings upon our heads; lightning gleams from one end of heaven to the other the converting influence of preaching; hail showers down wrath and vengeance upon the enemies of God's people; the unseen yet palpable air is the region of spirits; the winds show their power; meteors and falling stars are wanderers from the sphere and firmament of heavenly truth.

The dealings and attributes of God are moulded after the characters and actions of men. God is a father. He has love, compassion, jealousy, indignation. He rewards and punishes. He forgives those who forgive

their fellow-men; reverses His promises to those who forfeit them, and revokes His release from the unforgiving debtor. He yields to persevering importunity in prayer; and is to be depended upon like an earthly father to give good gifts to His children. He metes to men as they measure to one another. He is fed by sacrifices of the hand and heart, and smells the sweet savour of our worship.

Diseases of body are so identified with diseases of the mind,—and both of them with sins,—that they are spoken of indifferently. “Then shall the lame man leap:” “the blind shall see:” “the tongue of the dumb shall sing.” The Saviour says of the woman bowed down with infirmity, “Satan hath bound her;” to the palsied man, “Thy sins be forgiven thee.”

Death of the body and of the soul are so corresponding as both to be spoken of in the same expression, cumulatively or ambiguously: (Gen. ii. 17; Isa. xxv. 8; John, viii. 51; Rom. vi. 9; viii. 6.) There is a spiritual resurrection and a resurrection from the grave: (Eph. v. 14; Col. iii. 1; John, v. 25–28.) Heaven and eternal life are both in this world and the next: (John, iii. 13, 35; v. 24; vi. 47, 54.)

Let us conclude our illustrations from religion and revelation; though all being the work of the Divine hand and His manifestation to Man, everything is religion and revelation. “Origin,” says Neander, “went on the analogy between the Holy Scriptures, as the work of God, and the whole creation, as proceeding from the same divine Author.” Lastly, between Christ and His Church, between Christ, His Church, and each individual soul, there is such parallel and identity, that what

is spoken of one is spoken of all the rest; as is seen throughout the Psalms, the Canticles, the Prophets, and the Epistles. The climax is, that the Incarnate Word and the written Word are identified in use and principle: namely, that every act of the one as every word of the other is at once entirely Divine and entirely human.*

Let us turn now to topics of ordinary use and philosophy. There is analogous growth from youth to maturity, and thence to old age, in individuals, in nations, and in the human race. The vegetable and animal world have an analogous life—the sap in one circulates like the blood in the other; winter is to the one what sleep is to the other, and after a long and hard winter frost the vegetable creation wakes up to an unusually active and energetic growth. Pulsation, that is, effort and remission, is a universal principle, perpetuating power and strength: from the action of the heart to that of the other muscles, to the accent in music, in poetry, and in the ordinary pronunciation of words, in breathing, in exercise, in sleeping and waking, in the Sabbath rest, in feasting and fasting, and in the use of medicine, and in all the bodily and mental powers,—perpetuating and increasing their action and strength by alternate exertion and rest. Comparative anatomists find the strictest analogies running through the whole of the animal creation. Botanists find the same in the vegetable. Geologists discover that the same relations have existed through countless ages from the beginning.

* See Book IV. Man the Model of the Universe; and the Necessity of the Incarnation.

Sex is the source of life; and living forms are continued in the vegetable as well as the animal kingdom, not only by the distinction of male and female, but also by the same laws of genera and species. The ancients expressed the generality of this principle as being the universal law of Creation, by personifying the Heaven as the husband of the Earth, which by the fertilising influences of its rain and sunshine (and we may now say, of its electricity, its ozone, its carbon, its nitrogen, and other principles of the air) impregnated the earth, and made it the mother of all the productions of nature. And so engrafted is this law, that most nations have impressed the distinction and relation of masculine and feminine upon every object and idea by the seal of language.

Thus the whole of Creation and the universe is linked and interwoven together, in every kingdom, and province, and production, and operation, by analogy, and law, and repetition, and mutual reflexion, and similitude.

SECT. 8. USE OF ANALOGY IN REASONING.

THE universe being so formed, the mind of Man, the microcosm, is so constituted as to be adapted to this frame of nature, and to appropriate these analogies: just as the senses and faculties are ready prepared to receive and retain the phenomena of the external world; the eye light and colours; the ear sounds; the feeling substance; the nose smells; the tongue tastes; and the dormant dispositions and powers of the mind are ready to be developed by the atmosphere of affections and

incidents, the trials and pleasures of human life, by which it is surrounded.

This then being the constitution of Man, and of the universe, he reasons, and rightly reasons, by analogies. The perfect appreciation of the analogies of the universe, animate and inanimate, mental and moral, physical and æthereal, is wisdom and truth; the acting according to it is the perfection of human conduct and character.—God has ordered and ordained types and parables, in incidents and events, and persons, and phenomena, on the surface of time, and in the pages of the world's history, which may lead men up by beacons and inscribed way-marks to perfect observation and knowledge of God's Providence and workings.

But type and antitype are so analogically connected in the natural course of events and the world's progress, that no clear distinction can be drawn between what is in natural course and what is a specially ordained type.

Examples of the most notable types are the lives of the patriarchs, and the special events which characterised them: as the death of Abel; the descent of Joseph into the pit, and his exaltation to be worshipped by his brethren, and to feed them of grace, refusing payment; the offering up of Isaac; the brazen serpent; the rock in Horeb; the conquest by David of Goliath, with five smooth stones, that is, the perfect doctrines derived from the Pentateuch; and the crowning, marriage, judgment, name, and peaceable dominion of Solomon. The redemption from the bondage in Egypt is a sign of redemption from the bondage of sin; and the Plagues of Egypt, and the fall of Jericho after the seven days' warning trumpets, are made the signs of the destruction of

the apostate Jerusalem, and afterwards of the apostate Church of gentile Christendom. Numbers and dimensions are consecrated to be types: as the multiples of 4,—40, 400, and 4000 years, are the periods of trial and trouble,—in the wilderness, in the sojourning of Abraham's seed, and of the world to the coming of the Redeemer. Squares and cubes of numbers are significant of completeness, both of good and evil: as, the 144,000 sealed; the 1600 furlongs of carnage; the wall, 144 cubits; the New Jerusalem four-square; and the length, breadth, and height of the Holy of Holies, and of the City of God, all equal. Seven days are the divisions of the week; seven periods of the world's Creation; seven thousand years are the seven stages of the progress of the human race to the re-creation of Man:—each of them ending with a Sabbath period.

Thus even colours, stones, metals, the four elements, trees, mountains, valleys, rocks, seas, islands, deserts, all things material, are consecrated and appropriated as types and tokens of spiritual and heavenly things.*

The use of analogies is convenient in matters of which we have knowledge and experience; it is absolutely necessary in those things which are beyond our

* The hymn in the "Christian Year" for Septuagesima Sunday, expresses this analogy of Man with nature,—the creation:—

"There is a Book who runs may read, which heavenly truth imparts, &c."

"The works of God above, below, within us and around, &c."

* * * * *

"Two worlds are ours, 'tis only sin forbids us to descry
The mystic heaven and earth within, plain as the sea and sky."

experience; and the more so the higher the subject rises above our experiences. Our Lord illustrated the influence of the Holy Ghost by the wind, because Nicodemus had not apprehended it by experience. And, "If," he added, "I have told you earthly things and ye understand not, how shall ye understand if I tell you of heavenly things?" Therefore heavenly things must still more be illustrated by analogies: as, the foundations of the wall of the city are precious stones; the twelve gates are pearls; the city is pure gold, like unto clear glass; the river of the water of life is clear as crystal; the tree of life bears twelve manner of fruits; the glory of God and the Lamb are the light of the New Jerusalem, and all our Lord's teaching are by parables.

All creation then and history, especially religious history, are parable and type; the faculties and reason of Man are adapted to and employed in apprehending and appropriating these types; all revelation of things invisible and spiritual are made by parables of the outward world, all our conclusions and opinions are guided and corrected by analogies and similitudes; and he who exercises all his faculties,—apprehension, memory, recollection, imagination, generalisation, comparison,—most perfectly in appreciating and applying these parables, analogies, similitudes, and types, pursues most exactly the paths of wisdom and truth, and attains the end of reasoning and judgment.

CHAPTER IV.

WHAT LOGIC IS.

It is necessary then to come to an agreement what Logic is; and whether I am right in giving this name to my treatise.

There is no true wisdom in a name. And it might be objected, Why do I not let Logic alone, and, proposing a new instrument fitted for use in moral and religious truth, leave Logic to its own departments; where it has justly ruled and reigned, by the consent of the enlightened, for centuries?

I could not do this. For, first of all, Logic has never confined itself to any special department; but, on the contrary, its professors have claimed for it universal use and application; from Aristotle downwards. Some few indeed have doubted, or suspected its universal sufficiency; but its devotees have claimed for it the prerogative of perfection: which could not be ascribed to a limited instrument.*

Secondly, my pretension is, not only to propose a new system, but also to depreciate and exclude the old, as frivolous and injurious.

Thirdly, I mean to contend that all Logic is of one kind, and incapable of separation; and that if the

* See Quotations, pp. 372, 373, 374.

Aristotelian Logic have any use, it is only as an ultimate and particular branch of the genuine system, which is universal.

Lastly, it is necessary to show this, because in all arguments against the School Logic this is the course which its defenders take. First, they contend stoutly that their Logic is perfect, and of general use; and then when it is shown to be inapplicable to the higher branches of human knowledge, then they say, we are talking of different things, and that their machinery is at all events the foundation, and good so far as it is applicable. But I mean to show that it is not the foundation, but the exception; and good for little even in its own narrow department; and without use and mischievous if applied out of it.

Moreover, Bacon, when he proposed his New Organon, found it necessary to depreciate and exclude the old instrument, as intending to occupy the same ground; and to put an improved and better one in its place.

What then is Logic?

Logic is Reasoning.

It is idle now to contend that "words" only are the materials of Logic; and that the right working of verbal propositions according to prescribed formulæ is its profession, and successful result. Even Aristotle saw that Logic required something more than the use of words, and was constrained to admit the superiority of ideas. Logic may point out the ambiguities of language, as Aristotle does in his Topics, (Bk. viii. ch. 7), and in his Sophistical Elenchi (chap. 4, 7, 17, 19); but this itself is a reference from words to ideas, and shows that not the mechanical use, but the correction of the

fallacies of words is one of its important uses and departments.

Logic embraces all reasoning.

The word itself shows it, and necessitates it. In almost all languages "word" and "reason" are the same word:—words, and language, are looked upon as the expression of the ideas. In the Greek, whence the title "Logic" is derived, it is more expressly the case. *Λογος* (*logos*) is "reason," as well as "word"—"discourse." *Ρημα* (word) means "thing," in Greek. *דבר* (word) means "thing" in Hebrew. In English, our "conversation" means our habit of life and conduct. But most especially in the language itself from which the name is derived, *Λογικος* (*logicos*) means rational, reasonable,—*Λογίζομαι*, to reason.

But this is the way in which the word Logic is always understood and applied in ordinary use; and it could not be otherwise. If it had deliberately and uniformly professed only the limited use under which, in the extremity of self-conviction, it would shelter itself, it would long ago have lost all its estimation and influence, and been scouted from civilised and serious education. It is only through its larger pretension and double-faced profession—at one time grounding itself upon the narrow footing of mathematics and physics, and at another throwing out its professions and claims, and aweing the world from this narrow stronghold, in which it seemed to be impregnable—that it has at all been able to keep its antiquated authority and empire against the liberty and requirements of enlightened knowledge and religious aspiration.

Louis Napoleon writes, in his "Life of Julius Cæsar"

(Pref. p. 10), "But in writing history, by what means are we to arrive at truth? By following the rules of Logic." Again, "Just as Logic demonstrates that the reason of important events is imperious." (*Ib.* p. 11.) And again, "Let us be Logical, and we shall be just." (*Ib.* p. 12) Mills' Logic says, "Logic is an analysis of the process called reasoning: or inference from evidence." But it is not necessary to multiply quotations. These expressions commend themselves to us as the general mode of speaking when the subject of Logic is touched upon, or the word used; and every one knows that "Logic," according to approved use means "reasoning," in its extended signification. And if it is reasoning, then it is the investigation and persuasion of opinion and knowledge by all the instruments and modes by which the reasoning faculties are applied. These are infinitely multiplied and distributed into the shapes of syllogism, enthymeme, induction, example, simile, metaphor, analogy, parable, proverb, apologue, argument *ad absurdum* and *ad hominem*, *a priori*, *a fortiori*, from *majus* and *minus*, &c. Also all the modes of refutation and answer, by distinction of time and place and subject and purpose, and solution of fallacies, and resolution of ambiguities,—All these, and infinitely more, are modes and parts of reasoning; and as such are parts of Logic, and enter within the field of it.

There are other elements, in its widest signification and use, which need not yet be insisted on.

Such then is Logic.

If such then is Logic, it is applicable to all subjects of investigation and action, whatever they may be.

But how can the School Logic deal with matters of intricacy, and high interest, and exact degree, in which truth and wisdom consist? How can it determine whether the Sabbath is a law binding on Christians; or to what extent it should be observed? How can it determine even the question proposed by Aristotle himself,—whether the command of a parent or of the law, ought to be observed, in each case? How can it determine the force of idiomatic expressions? the application of contrary proverbs? What can it do in determining whether a description is figurative or literal?—whether Ezekiel's temple is to be real:—whether David himself is literally to be king:—whether our Lord is to come again in person? What in resolving whether a transaction is a type? as, Sarah twice, and Rebekah once, taken into a house of a gentile king:—much less what it is typical of? How can it appreciate incompatible figures, “I am the door,” “I am the Shepherd?” How can it reconcile, “Filled with the Holy Ghost,” Luke, i. 15, 41, 67, with “The Holy Ghost was not yet given,” John, vii. 39?—the originality of the confession of Peter, Matt. xvi. 16, 17, with John, i. 41, 49; iv. 42; Mark, i. 24, 34; v. 7; Luke, iv. 34; viii. 28? How Exod. vi. 3; “By my name Jehovah was I not known unto them,” with Gen. xxii. 14; ii. 4, 5, 7, 8, 9, 15, 16, 18, 19, 21, 22; vi. 3, 6, 7, 8; vii. 1, 16; xi. 5, &c.; xii. 1. &c.; xv. 6, &c.; xvi. 7, &c.; xviii. 1, &c.; xix. 14; xx. 18; xxi. 1, 33: in all which the word “Lord” is Jehovah in the Hebrew? What help can it give in comprehending how three branches and three baskets should signify three days; or that seven kine and ears

should be seven years ; or that the dream being doubled signified that it should shortly come to pass ? (Gen. xl., xli.) What in determining whether the application of a prophecy is in this generation or a future one ? or, whether it is of double fulfilment ? What, in short, in the comparison and conflict of opposite analogies ?

Logic must be competent to cope with all these topics if it pretend to dispose the mind in the higher branches of intelligence and reasoning ; otherwise it is unfitted to guide our walk and investigations as intellectual and moral beings.

But the School Logic is inadequate to direct us even in the common affairs of life and action. It cannot help us in the choice of a servant, a tradesman, or physician : in the safety of a venture : in the discernment of motives and character : the estimate of testimony and authority : the choosing of a course of study, or profession : the manner of bringing up children, mentally and bodily : the facing or fleeing from the world : the good and evil of a home education : the resisting a temptation.

The use of Logic (reasoning) is not speculative only : it is choice, and action. "The office of revealed doctrine," which is the subject of examination, understanding, and reasoning, is, as is frequently inculcated by Mansel in his "Bampton Lecture," "regulative, not speculative." *

* "The highest principles of thought and action are regulative, not speculative ; they do not serve to satisfy the reason, but to guide the conduct ; they do not tell us what things are in themselves, but how we must conduct ourselves in relation to them." (Mans. "Bamp. Lec.," p. 141.)

The business of life is the rightly conducting ourselves in our families, our friendships, our transactions, our clothing, eating, exercise, and sleeping, our self-discipline, our studies, amusements, enterprises, and aspirations. What can the School Logic do in directing us in these? Yet all these operations and ends are the subject of reasoning.

Logic is the reasoning rightly on every opinion we read, or testimony we may receive, or fact related, or plan proposed, or policy indicated. The use of Logic is not only that of scientific investigation. This is the falling short and failure of Bacon's "*Novum Organum*."

Logic is the just balance and estimate of probabilities in matters high and low, speculative and practical: specially in all things which affect our temporal and eternal interests.

I have shown above, in the Second Book, pp. 291-2, note, from Dr. Blane's "*Medical Logic*," what he conceived Logic to be; namely, that it is the collection and application of principles collected by a penetrating and judicious observation and induction.

COROLLARIES.

COROLL. I.

IMAGINATION is an instrument of Logic:—For without imagination we cannot form any conception of God,—of a future life,—of the spiritual world,—nor even of our future temporal life,—nor even of distant events and objects: all which are the proper subjects of reasoning and Logic.

Without imagination we cannot reason from analogy.

COROLL. II.

Emotion is a proper element of Logic, for action is the end of reasoning; and the will is to be influenced: on which the emotions essentially operate.

COROLL. III.

All the faculties of the mind are to be employed in the use of a true Logic. That is, reasoning, being the highest of all human operations, it properly and necessarily uses and exercises the whole man: the sentient, intelligent, and moral man. The various dis-

cursive faculties will better come to be enumerated and enlarged upon in the Fourth Book.

COROLL. IV.

Rhetoric is Logic. Rhetoric is persuasion : and persuasion is an act of argument and reasoning. And all that goes to persuade to truth, or to action, is a reasoning process. Everything therefore that operates upon the understanding or will, performs a reasoning process, and is logical.

This is demonstrable from Aristotle himself. For he makes enthymeme the instrument of rhetoric. But enthymeme, according to himself, is only an elliptical syllogism. It is syllogism with the major or minor premiss understood and not expressed. It cannot be otherwise therefore than the same thing in meaning and operation.

Demonstration is only an ultimate and exceptional form of rhetoric.

COROLL. V.

Oratory therefore is logical. Poetry therefore is logical. Since the will is to be impelled to action,—to ardent and sublime and enthusiastic action—even music has a logical use. It is the end of poetry, says Bacon, not only to delight the imagination, but to enlarge the understanding, to raise the genius, and purify the heart. There are different kinds of music, which impel to different kinds of action : martial music to courageous

acts,—tender music to sympathy,—sensual music to indulgence and sloth,—plaintive music to pity,—the major moods and sharps to hilarity and praise,—the minor and flat keys to reverence and devotion. Even smell may be persuasive and elevating to the mind, and incense in a church may impress the mind with reverence and awe, and be persuasive to devout worship.

COROLL. VI.

Analogy is the proper material of Logic.

Analogy, says Tatham, is the instrument of the understanding. (Vol. ii. 141.)

The matters mentioned in the last two corollaries, are introduced incidentally and theoretically, only to show the comprehensiveness of Logic in all its scope, and that everything which is capable of influencing the understanding and will is to be recognised, directed, corrected, and guarded against. But the substance of reasoning is analogy; and I have here to point out how that nothing in discursive reasoning is anything more than analogy,—whether it be syllogism, enthymeme, induction, example, metaphor and simile, type, proverb, maxim, or parable.

Even the perfecting of apprehension, so far as it is corrected by experience and judgment, is by the instrumentality of analogy.

But this calls for an extended and careful illustration.

CHAPTER V.

WHAT REASONING IS.

Reasoning is performed by induction* of analogies: not of exact particulars and examples: for there are no two particulars exactly alike,—that is, they are alike only, and not the same: for *nullum simile est idem*.

These must be more numerous and more exact according to the subject upon which the reasoning is exercised; and the more numerous in proportion as they are more inexact.

Analogy is a word of extended meaning and use. It may be between subjects of a like nature, or of different natures. It is more properly applicable to subjects of different natures. Hume says, If we see a house, we conclude an architect, but the universe is not a house; therefore we cannot conclude in favour of an architect or contriver of it. But Mansell properly answers, “It is not a question of likeness, but of analogy.” (Lec. iv. note 6.) In effect, they are equally analogies that are drawn, whether from the contriver of one house or

* Induction,—so much paraded as one distinct branch of the Aristotelian Logic, is only a form of analogical argument; and conclusive *sub modo*, and according to the nature of the subject: for no two particulars or examples are exactly alike, except in the lowest departments of physics. This has been observed in the Third Book, in treating of the Aristotelian Logic.

machine to another, or from the contriver of a machine to a creator of the universe. Only in the one case it is between things of a like kind, in the other between things of a different kind. To the latter the word "analogy" is most properly applicable; and the analogy is legitimate and perfect. To the other the word "example" more properly belongs. Both, in different degrees, are analogical arguments.

I am not yet treating expressly on the religious topic: this forms the subject of the Fourth Book. But occasional illustrations from religion may be helpful in this stage: especially natural religion.

Man's immortality and resurrection is among the most abstruse topics of reasoning inquiry. Accordingly the analogies are most numerous which dispose the mind to assent to it. The resurrection of the blade of corn from the seed,—of the flying insect from the chrysalis,—of day from night,—of waking from sleep,—of spring and summer from winter,—the waning of the moon in its month, and the new moon,—the fall and renewal of the leaf.

That a Providence preserves us is supported by many analogies, of the birds and beasts, and all animal nature being supplied with food,—the constant and un-toiled-for supply of air and water, the only uninterrupted necessities to man,—the preparation of springs and coals and metals for his use,—the adaptation of heat, cold, sunshine, shade, cloud, rain, dew, medicine, colour, sound, music, landscape, for his pleasure and use.

For Sabbath observance, the numerous analogies of effort and remission, of *Arsis* and *Thesis*, in the pulsa-

tion of the heart,—waking and sleep,—labour and rest,—accent and bars in music,—feet and rhythm in poetry and prose,—verse and cæsura. Even machinery is economically saved and restored by rest.* In all cases the remission being shorter than the effort, and the shorter rest restoring the full strength.

The moral precept, “With what measure ye mete,” requires fewer analogies in support of it: such as the action and reaction in physics,—the disposition to assimilation, induction and polarisation in electricity, light, and magnetism,—the growing likeness in voice, manner, and handwriting of persons conversing and corresponding together,—and any experiences we may have supporting the proverb, “As in water face answereth to face, so the heart of man to man.”

Baker, in his “Albert Nianza” (Vol. i. pp. 289, 290) has a good example of induction of analogies. “In childhood, I believe, the negro to be in advance, in intellectual quickness, of the white child of similar age, but the mind does not expand,—it promises fruit, but does not ripen; and the negro man has grown in body, but has not advanced in intellect.”

“The puppy of three months old is superior in intellect to a child of the same age, but the mind of the child expands while that of the dog has arrived at its

* It is found that a steam-ship which is regularly laid by for Sabbath rest, is made profitably more durable by it. Bianconi gave evidence before the Lords’ Committee, that a horse could do more fast work in six days than in seven. For that if he used a horse seven days in the week he could do only six miles in a day, and seven times six was forty-two; but that for six days with a rest, he could do eight miles; and that six times eight are forty-eight.

limit. The chicken of the common fowl has sufficient power and instinct to run in search of food the moment it leaves the egg, while the young of the eagle lies helpless in its nest; but the young eagle outstrips the chicken in the course of time. The earth presents a wonderful example of variety in all classes of the human race, the animal, and vegetable kingdoms. People, beasts and plants belonging to distinct classes, exhibit special qualities and peculiarities. The existence of many hundred varieties of dogs cannot interfere with the fact that they belong to one genus: the greyhound, pointer, poodle, mastiff, and toy terrier, are all as entirely different in their peculiar instincts as are the varieties of the human race. The different fruits and flowers continue this example" (analogy): "the wild grapes of the forest are grapes, but although they belong to the same class they are distinct from the luxurious 'Muscatel;' and the wild rose of the hedge, although of the same class, is inferior to the moss-rose of the garden.

"From fruits and flowers we may turn to insect life, and watch the air teeming with varieties of the same species, the thousands of butterflies and beetles, the many members of each class varying in instinct and peculiarities. Fishes, and even shell-fish, all exhibit the same arrangement,—that every group is divided into varieties all differing from each other, and each distinguished by some peculiar excellence or defect.

"In the great system of creation, which divided and sub-divided them according to mysterious laws, apportioning special qualities to each, the varieties of the human race exhibit certain characters and qualifi-

cations which adapt them for specific localities. The natural character of these races will not alter with a change of locality, but the instincts of each race will be developed in any country where they may be located."

All these examples of moral analogies admit of the introduction of contrary analogies ; and this in proportion to the number of analogies requisite, and to the elevation and intricacy of the subject. The analogy for a resurrection from the corn of wheat springing up again, was answered by Comoro, King of the Latookas, by a contrary analogy : "The fruit," he said, "produced is not the same grain we buried, but the *production* of that grain : so it is with man. I die, and decay, and am ended ; but my children grow up like the fruit of the grain." (Baker's "Albert Nianza," vol. i. p. 250.)

The analogies for a Providence may be opposed by the unequal distribution of climate and productions ; and this again by instancing the social advancement and advantages which have arisen from commercial interchange among nations.

The Sabbath advantages may be opposed by examples of statesmen and professional men who have toiled without intermission ; and these may be answered again by instances of loss of reason and health, or inferiority of work, or the necessity for a longer rest at greater intervals.

These contrary analogies must be accumulated, compared, corrected, and balanced, and the conclusion and degree of confidence and certainty estimated, and the nice and proper use and adaptation to the purpose in hand made from them.

Descending in the scale analogies become more exact ; and fewer of them are required in leading to a conclusion.

A good tree bringeth forth good fruit,—a fig-tree figs, a vine grapes, a fountain either sweet water or bitter, not both. The analogy fails as applied to the tongue ; but it holds good with respect to the human heart.

In vegetable nature, shrubs with polished leaves grow best under trees. In the animal world fish are good eating in proportion to the smallness of their scales ; but there are some exceptions.

Little men are sharp,—tall men are less active ; men with large noses are intellectual,—with broad foreheads have strong reasoning powers,—with long chins are firm,—with high foreheads are benevolent, *for the most part*. How many examples would it take to verify the craniologist's map of the brain in all its thirty-six faculties ?

In Medicine fewer experiences are sufficient to test and establish the effects of a nostrum. But constitutions are different : experiments therefore are inexact. No two persons are precisely in the same state, and no one person at any two different times. Therefore any experience in medicine is only an analogy : admitting of error, and requiring nice discrimination in the use ; and therefore requiring a greater number of examples.

Descending to Chemistry, one perfect and exact experiment may be supposed to be sufficient for certainty of the same result at all times. But this is not the case even in chemistry. There is a certain acid in which an iron rod may be made to stand :—if the rod

is struck at one time, the acid will act upon the iron ; if it is struck again, the action of the acid will cease. The exactly same elements and ingredients chemically combined, will form different and dissimilar compounds.

Examples therefore in these cases are not exact and certain.

The great example of analogical argument in physical philosophy is furnished in the science of geology. Some of its phenomena admit of opposite exemplification ; many are questionable ; all its conclusions are conjectural.

What, therefore, must we ultimately admit with regard to mechanical forces, and in regard to magnitude and number, the subject of mathematical demonstration ?—that their materials are examples still ; but that in their ultimate and exceptional case they are *exact* examples. One example therefore furnishes a sufficient certainty and proof. But this is only in the lowest region of nature and reasoning, the sphere of inert, inanimate matter : of physics.

But this is only, as it were, the collapse of analogy in example : the collapse of reasoning in simple perception and apprehension : which is not reasoning.

But even this is in fact analogical, and not identical. There are no two material forms exactly alike ; there is no such thing as a perfect sphere, or circle, or triangle. Each is only an approximation to what it is called :—*i. e.*, it is analogical. It is analogical to that which alone is identical,—that is, to the idea : and that is one and the same, and therefore not the subject of example,—for no one thing can be an example of itself. This therefore, I say again, is the position and preten-

sion of Mathematics. It is not the subject of Analogy, only because it occupies itself with simple ideas, and not things,—all and each of which are different one from another:—it deals with simple and exact ideas, each of which is in every use and application of it identical, and one; and as such is the subject of simple apprehension only, and not reasoning.

Mathematics then are in effect only an ultimate and exceptional form of analogical reasoning: even as the circle is proved by Newton to be only an ultimate and exceptional form of ellipse; and the School Logic is only an ultimate and exceptional form of Rhetoric; and Syllogism is only an ultimate and exceptional form of Argument.

This will appear from the analysis of argument which I now proceed to make.

CHAPTER VI.

WHAT ARGUMENT IS.

ARGUMENT is Reasoning. It is the communication of the reasoning of our own minds to another person's mind.

Argument is such a common and habitual exercise of reasoning, and occupies so much of our use of it, is so obvious to our eyes and ears and prominent, that it takes the name of Reasoning, and in common thought is identified with it.

It is so confounded with reasoning, that Aristotle formed his whole Logic and theory of Reasoning upon the experience of it.

To us its analysis will furnish an important help in understanding the process of Reasoning which is mental:—the external, which is the expression of the internal and real, will open the way to it, illustrate, and give form to it.

Argument being a communication of reasoning from one mind to another, it must communicate by an instrument. The instrument of communication is words—language. But though language only is employed ministerially, more than language is brought into use and exercise. To take the simplest example,—look, tone,

gesture, emotion, directing, qualifying, and enforcing meaning, awakening sympathy and sameness of idea, correct and modify language, and give to it a wider scope and nicer application than belongs to its own natural ambiguity, and limited capabilities, and coarseness of material and texture.

But Argument, though couched and conveyed in words, stretches its operation beyond the province and region of language, to a far greater extent than the merely modified and elastic scope given by the above agents of insensibility and sympathy.

We reason by experience.

We apprehend by experience: for the new-born infant would put out its hand to feel the sky; and when grown, we judge distances and slopes by experienced effects of shade, position and colour.

All therefore is experience.

Our experiences form into groups. By the reasoning faculty of generalisation, comparison, and distinction, we collect things alike in our memory, and store them in classes.

But human powers are limited. The first foundation and principle of reasoning is, the limited capabilities of man, in apprehension and memory. The next is, his extreme littleness, and the infinitesimally narrow area of his knowledge and observation in the boundlessness of creation and nature immediately surrounding him. The full conviction and appreciation of these two truths is the essential qualification for the due study and estimate of Logic, and the successful application of reasoning and judgment: of course, in a greater and less degree according to the lowness and elevation of the subject.

The memory cannot recollect all experiences and facts: even if the apprehension of every one of them were in the first instance perfect. Even with the aid of this classing and arrangement, the memory only keeps within view and command striking and leading cases; the rest it leaves grouped in shade and indistinctness and in reserve behind them, to be summoned and called up in support, as exigency and effort may bring them into action.

More than this, the weak but aspiring mind,—incapable but ambitious,—ever making more conquests and acquisitions of observation, but unable to retain them: ever actively toiling beyond its strength, and requiring rest,—generalises more and more, dismissing all but the few prominent points in which many experiences agree, and letting go the rest into haze and vapour, preserves a limited and possible number of principles and maxims in store for use, and reposes from the remainder. The mind, says Bacon, soars up to the highest conclusions, that it may find rest. These it embodies and expresses in words: an instrument, and of a material, suitable to ideas now become so unreal and representative. These it places as garrisons in the conquered fields of knowledge, confined and entrenched in lines and limits which are defined and impregnable,—asserting right and power over the whole—for want of forces sufficient to spread themselves over the face of the whole country. It embodies them in the uniform of words: equipped and marshalled for drill and warfare, but not performing the ordinary and essential duties and acts of real life.

These are the materials and instruments of argument.

Argument is the interchange of principles, and application of them to the subject in question. It is an appeal to general truths supposed to be admitted; or the suggestion of new ones claimed to be admitted from experience, or upon the ground of new facts pointed out. In either case the principle, enunciated in words, challenges the corresponding, the antagonistic, the responsive mind to call to memory, and apply facts before or then for the first time known, and support the conclusion by one or more analogies. The principle does not derive its force and application from the words in which it is enunciated, except fallaciously, but represents in each mind only those instances which are called to memory in support of it, and applied accordingly; though each disputant assumes that the principle enunciated in words represents precisely his own experiences, and enforces it accordingly.

No one can have adequate and universal experience in anything, so as justly to assert an universal proposition; in which case the conclusion must be one of the things known, and there could be no need of argument. Principles and propositions only represent, and are suggestive to the mind of a certain number of facts and phenomena, inciting the memory of the opponent to a similar partial recollection. This Taylor, the eulogist of Aristotle, himself admits and expresses in these terms: "The universal, which is the proper object of science, he says, is not derived from particulars, since these are infinite, and every induction must be limited to a finite number. Hence the perception of *the all* and *the every* is only *excited* and not *produced* by induction." *

* In O. F. Owen's *Organon of Aristotle*, Vol. I. p. 286, note.

But the self-satisfied mind fancies that it has acquired all experiences; and this persuasion is in proportion to the narrowness of view and ignorance of the theorist: for the wiser the inquirer, the more he concludes from every discovery that he makes that there is more beyond; and the man of greatest knowledge is the most sensible of his own ignorance.

But few are thus thoughtful and scrupulous. The many are sanguine and confident. The term, "all," is applied to our general experiences,—to anything we are persuaded of upon however insufficient grounds; and this expression has become the general mode of assertion in every degree of knowledge and belief,—in every subject. Hence the theory of syllogism, and of universal propositions. But the term is only one of idiomatic and metaphorical use; and is not even felt or supposed to be literal, or insisted upon as such by any one, on the most cursory consideration.

We say, "All" the world says: meaning no such thing. We say, "Every one" knows: meaning only that it is a general opinion. David says, "All" men are liars: meaning a multitude of his enemies: "All" men that see me laugh me to scorn; but certainly not my faithful followers and admirers. "All" has reference to the express subject in hand. "Every man with his staff in his hand for every age," (Zech. viii. 4.) "All that ever came before me are thieves and robbers," (John, x. 8.)

The meaning is different according to the subject. "They are all gone out of the way:" means the majority and the multitude. "All the world are gone after him:" means those who do not think with themselves. "Every-

body wears a beard," means the fops and the fashionable. "Everybody has his price,—there is no honesty now in trade," means that money is prevailing more and more over honour and conscience. The French are short-sighted: means compared with other nations. The English are taciturn, as compared with the French. Spaniels are affectionate, does not mean that they all are so. Rooks are gregarious: but certain rooks build solitary nests. All animals have a stomach: but we are prepared to acknowledge any exception that may be discovered. The stomach is the only organ of nourishment: but some in disease have been fed by the skin. The eye is the only organ of sight, and the skin of touch: but one person, in a morbid condition of the nerves, has seen with the skin; blind persons have known colours by the touch; and there have been other inversions of the senses. All acids have affinity for alkalies, seems to be unexceptionable in chemistry: and so of its other laws. But one and more exceptions have been mentioned already; and there is only a close approximation to universality. It is a law of motion that a force cannot produce motion at right angles to itself. But an exception has been met with; for electromagnetism produces a motion circling round itself.

In nothing does "all" mean necessary universality except in mathematics. The angles of every triangle are equal to two right angles. But it is an ideal triangle: the creature of definition; and the idea is single, as I have before shown. Every singular thing is indeed a universal, as Aristotle and the school-logicians show; and therefore "all" may be applied to it. "Socrates is wise,"—"every" Socrates: this man is Socrates; there-

fore this man is wise. This is mere words : an expression of identity, and nothing is shown. It is the subject of apprehension and understanding : there is no room for or exercise of reasoning or judgment. It may be, of argument.

Such being the force of "all" and "every," it is sufficiently easy to explain the frequent use of it. It represents those examples which have come under the notice, or are in the recollection of the person who states the proposition. It represents his experience, and challenges a similar experience in the mind of the listener, or opponent in argument. The experiences may be the same, but in most likelihood they are not. None can know all instances. Few can know the same. In each one's mouth the proposition mostly represents a few cases, the immediate subject of recollection or observation : often two, or one prominent example which forcibly strikes the attention, or seems to represent past experience, and is brought forward in hopes that it will awaken and revive confirmatory recollections in the hearer.

Hence it appears that example is of the same nature in argument as a general proposition. It is used as representing a class of experiences, and for the purpose of obtaining consent that it stands foremost in a class of corresponding experiences. Thus one example stands in place of a proposition ; and one or a few prominent and striking illustrations often so engage and occupy the whole mind, that they seem to embrace the whole field, and to establish an incontrovertible truth. And in this way a lively and forcible illustrator leads captive the whole mind, and we are led away for the

occasion by listening to only one side of an argument, till time passing, and the vivid and engrossing impression wearing off, we have room for the suggestion of opposite experiences, and leisure to weigh examples against examples.

An *argumentum ad hominem* is the same thing. Inasmuch as it is any argument at all, and not a mere putting to shame and exclusion of reasoning; it is an appeal to experiences of an opponent similar to our own: namely, those which he himself has found sufficient to lead him to the conclusion to which his present opinion or conduct is a contradiction.

Argument from authority is of the same kind: being a reference to another person's experience, who is, from his success, supposed to gather and use his experiences well.

Therefore the adducing of analogies and examples are no proofs: they are illustrations only, showing the real nature of the proposition which is advanced, and inviting the recollection of similar experiences in confirmation. If such confirmations are not conceded the argument fails, for no one is persuaded contrary to his experience. This was the force of the Socratic argument, that it dexterously directed and brought out into use the hearer's experience.

Therefore it is often the sufficient, and best way to persuade, simply to put the proposition clearly: illustrating it only so far as to make it clearly understood, and there to leave it, for other persons' experience to confirm and corroborate. A moral truth well and clearly enunciated has already received its best proof.

In reality, the mind being so narrow, and, from its

weakness and eagerness so easily engrossed by the present objects and impressions, men attribute to the expression "all" its full weight, and use it literally; and this in proportion to the common shallowness of thought, and degree of ignorance.

Syllogism, laying hold of this expression and habit, and systematising the mode in which it is commonly used in argument, which is good as far as it goes, and rather requires correction and regulation from its too general use, but is fallacious and unphilosophical if it is at all extended and made technical—has reared a lofty structure upon this shallow foundation. Finding one narrow abstract point for its application, it has made ambitious claim to the whole field of argument; instead of limiting and defining its exceptional nature and theoretical use, and showing that all other reasoning in its endless variety and boundless extent is at the utmost only analogous to it.

The proper subject of perfect Syllogism—mathematics being single ideas, and on that account universal, it follows that Syllogism is only the ultimate and exceptional condition of argument, in which a single example forms the ground-work of a certain conclusion.

But it is very remarkable that even mathematics do not afford an example of perfect Syllogism, but only of analogy of a Syllogism.

The profession of syllogistic reasoning is to prove identity. The only proper coupler (copula) of the parts of a proposition and conclusion is "is." Now the conclusions of geometry and algebra are, "Is equal to:?" which is an expression not recognised in pure syllogism; and is quite a different idea and relation from

“is;” and for the use of which no precepts are given. And if any such there were the several equalities must be distinguished: of magnitude: weight: number: proportion: force: power: rank: influence: virtue: motive: character: estimation.

Mathematical reasoning, therefore, is only the analogy of a syllogism.

How much more this is the case in all other and higher subjects of reasoning is obvious, from the nature of them, without examples. But take a few exemplifications from attempts which have been made, with supposed success—

Every rectilinear figure may be squared :
 Every circle *may become* a rectilineal figure :
 Therefore every circle may be squared.

Here, “may become” is not the direct and proper form of a logical proposition. It is an approximation therefore only, and an analogy to a syllogism. And Aristotle gives it himself as an example of an oblique or indirect syllogism.—(Prior Analyt. bk. ii. ch. 25). And this is a mathematical syllogism. Much more then must every syllogism upon any subject of debate and action be indirect, and an approach only to a syllogism.

Barclay, in his “Apology for the Quakers,” affects the use of syllogisms in his proofs. Here are some examples of them.

“If no man knoweth the Father but the Son, and he to whom the Son will reveal Him, then there is no knowledge of the Father but by the Son.

“But no man knoweth the Father but the Son :

“Therefore there is no knowledge of the Father but by the Son.” (Prop. 1.)

Here, first, the hypothetical form "if" is new to exact syllogism, and therefore only analogical. Next, the terms in the major and minor are different: what is single in one being enlarged to a double proposition in the other. Thirdly, the syllogistic form does not help the conclusion.*

Let us take another instance.

"That which any one firmly believes as the ground and foundation of his hope in God, and life eternal, is the formal object of his faith:

"But the inward and immediate revelation of God's Spirit, speaking in and unto the saints, was by them believed as the ground and foundation of their hope in God, and life eternal:

"Therefore these inward and immediate revelations were the formal object of their faith."—(Prop. 2.)

This is a close analogy to syllogism. But it is only an analogy.

* Aristotle, with his comprehensive view, does make mention of hypothetical syllogisms (Prior Analyt., Bk. i. ch. 29, 44: Topics, Bk. i. ch. 18); and he makes promise to treat of them at large, which he never fulfils. But by the term he intends much more than the simple form in the above example. And he admits them to be only analogical syllogisms. It is true that the simple use in the example is within the limit of strict syllogism. For the force and etymology of "if," is "give;" and this form in effect does not differ from the admitted use of *datum* in mathematical propositions. Indeed everything is a datum in mathematics: everything being founded upon definition, which is ideal and artificial. Given the definitions, the rest follows by comparison. So that, in fact, all mathematical demonstration is hypothetical: and this is the form of the true syllogism.

This, however, is not the form used in the example. For "if"—"but"—, are introduced as relative and dependent into the body of the syllogism. Of this there is no example in pure syllogism.

“That which,” is a new expression in syllogism. But supposing it to be changed into “all which,”—then “any one,” is new also. But change this too. “All which all men :” this is altogether a new and compound form in syllogism, and only at best analogous to one.

Then, The inward revelation, &c., “was believed.” But in the major it was “believes.” This change from the passive to the active, is another analogy only.

But let us change it and formalise it again :—All things which all (or any) men have believed, &c.

The inward revelation is *one* thing which *some* men (the saints) have believed.

Here there are two minors to two majors. This, therefore, is a double or compound syllogism. Truly a new form and figure in syllogism. Truly an analogy of a syllogism. And out of all this how comes out the conclusion? Let us try to formalise it.

The inward revelation is *a* thing which the saints (?) *have made*—; but this is a new term and copula, and not warranted. Let us try again :—Which (?) *is to* the saints—. But this is new also. Try again. Which *is* the formal object of the faith of the saints.

The whole syllogism then will run thus :

All things which all (or any) men have believed, &c., were (are) the formal objects of their faith :

The inward revelation, &c. is a thing which some men (the saints) have believed— :

Therefore, the inward revelation is a thing which was (is) the formal object of their (the saints) faith.*

* The interchange of “was” and “is,” is immaterial in this case. But it is not so by virtue of the form, but on account of the subject. The fallacy called *mentiens* is founded upon not

This is the nearest to a perfect syllogism to which by any pains we have been able by changes and substitutions and references and parentheses to bring it. The conclusion is well proved enough. But we may defy Aldrich and all his disciples to draw it formally and verbally from the premises. After all, it is but an analogy of—a something like—a syllogism.

Let us add a few more, for exercise :

“ No man can be a minister of the church of Christ, which is His body, unless he be a member of the body, and receive of the virtue and life of the head :

“ But he that hath not true grace can neither be a member of the body, neither receive of that life and nourishment which comes from the head :

“ Therefore far less can he be a minister to edify the body.”—(Prop. 10)

And here are three together in a consecutive array.

regarding this interchange. It is this: “ If a man says, ‘ I lie :’ then, if he lies he speaks truth : if he speaks truth he lies.”

The solution is by distinguishing between the past and the present, which are confounded : Thus,—

If a man says “ I lie,” that is *did lie* : then if he *did lie* he *now* speaks truth ; if he *spoke* truth, he *now* lies.

Again. Every unrepenting sinner is reprobate. I was an unrepenting sinner : therefore I am reprobate.

There is error in this change of “ was ” to “ is,” which is clear and plain because of the subject ; but there was no erroneous conclusion in the example in the text : also, from the nature of the subject. But syllogistically the truth of the conclusion should appear only from the form : according to which all conclusions must be alike good or bad. Therefore the truth or falsehood appears from other matters beside those which can enter into a syllogism : that is, from the reasoner’s own knowledge and appreciation of the subject, and limitation or enlargement of the effect of the formal reasoning.

“The promises of Christ to His children are Yea and Amen, and cannot fail, but must of necessity be fulfilled :

“But Christ hath promised that the Comforter, the Holy Ghost, the Spirit of truth, shall abide with His children for ever, shall dwell with them, shall be in them, shall lead them into all truth, shall teach them all things, and bring all things to their remembrance :

“Therefore the Comforter, the Holy Ghost, the Spirit of truth, is abiding with His children, &c., is Yea and Amen, &c.”

Again : “No man is redeemed from the carnal mind, which is at enmity with God, which is not subject to the law of God, neither can be : no man is yet in the Spirit, but in the flesh, and cannot please God, except he in whom the Spirit of God dwells :

“But every true Christian is in measure redeemed from the carnal mind, is gathered out of the enmity, and can be subject to the law of God ; is out of the flesh, and in the Spirit, the Spirit of God dwelling in him :

“Therefore every true Christian hath the Spirit of God dwelling in him.”

Again : “Whosoever hath not the Spirit of Christ is none of His ; that is, no child, no friend, no disciple of Christ :

“Therefore every true Christian hath the Spirit of Christ.” (Prop. 2.)

Gebrard’s “Olshausen” is constantly finding syllogisms in the Epistle to the Hebrews. Let us take an example or two :

Ex. 1st. He says that in Hebrews, vii. 15–17, the

proof that Christ as Priest could not be born according to the Law, is drawn syllogistically. The verses are:—

“15. And it is yet more evident: for after the similitude of Melchisedec there ariseth another priest:

“16. Who is made, not after the law of a carnal commandment, but after the power of an endless life:

“17. For he testifieth, Thou art a priest for ever after the order of Melchisedec.”

He says, “From the major proposition, ver. 15, the conclusion is directly drawn in ver. 16; and then in ver. 17, the minor which connects the two is added in the form of an explanation.”

Now, tolerating the paraphrastic circumlocution, “Not after the law of, &c., but after the power, &c.,” let us reduce it to its simplest proportions.

There is another priest in the likeness of Melchisedec:

Melchisedec is a priest for ever:

Therefore there is another priest who is for ever, (*i. e.*, of an endless life: therefore not carnal: *i. e.*, mortal, and so requiring succession).

Even reduced to this ultimate form and skeleton,—after leaving out all circumlocution and parenthetical propositions,—even in this abstract, the *copula* in the major is, “in the likeness,”—which is not found in the minor. And if it were, “in the likeness,” “is like,” is still further removed from the syllogistic “is” than “equal to” is in mathematics, and therefore is still more only an analogy of a syllogism.

Ex. 2nd. Hebrews, xii. 9, 10:

“9. Furthermore, we have had fathers of our flesh which corrected us, and we gave them reverence: shall

we not much rather be in subjection unto the Father of spirits, and live?

“10. For they verily for a few days chastened us after their own pleasure; but He for our profit, that we might be partakers of His holiness.”

In verse 10, he says, follows the idea which forms, “as it were,” the minor proposition between the major, “We have had,” &c., and the conclusion, “Shall we not much rather,” &c.

Ex. 3rd. Hebrews, ix. 16, 17, 18 (according to Ebrard’s translation):

16. “For where a covenant is, there the covenant-maker must be dead.”

In verse 17 he repeats the same idea, “A covenant is valid in the case of persons who are dead, as it never has force if he who makes the covenant is alive.”

“18. The first covenant also was not consecrated (inaugurated) without blood.”

“He is fond,” Ebrard says, “of making at once a bold leap from the major proposition to the conclusion (or, as here, from the conclusion to the major proposition), and to bring in afterwards the connecting ideas.”

“In verses 18, 55, the author gives the solution of the enigmatical conclusion.”

But in this and the last example, he seems himself to confess that it is only “as it were,” and by a bold leap or flight,—and analogy therefore—that they approach to the form and force of a syllogism.

Mr. Moncrieff, Inspector of Schools under the Committee of Council on Education, says, that the 9th of Romans may be thrown in syllogisms. As he has not

given us his instances, we need not spend our labour in applying my rule to them. But I challenge him or any one to reduce the arguments to anything more than analogies of syllogism.

Romans, x. 14, to the end, is a perfect but intricate argument. Let the most skilful dialectician try to syllogise it.

I quote again, for the use of those who would pursue the subject, Mr. Grinfield's note on Dr. Tatham's "Chart and Scale of Truth" (vol. ii. pp. 320-1): "Those who wish to be ocularly convinced of this assertion" (that mathematical reasoning is perfectly syllogistic) "may consult the Euclid of Herlinus (Argent. 1566), in which the first six books are laboriously converted into syllogisms. Barrow, in his 'Lectiones Mathematicæ,' p. 106, has turned the first proposition into enthymemes. See also Clavius's Euclid, lib. i. prop. 1.—'It would be difficult,' observes Dugald Stewart (vol. ii. p. 260), 'to devise a more effectual expedient for exposing to the meanest understanding the futility of the syllogistic theory.'"

In effect, people in general using "all" and "every" as a common expression and form in arguments—partly for convenience and briefness, and not meaning so much; partly from positiveness and confidence in their own propositions, and trying to carry victory in argument by a *coup de main*; and partly, or chiefly, because the few examples which occupy our minds at the time seem to our narrow view, limited experience, and feeble recollection, to be all the instances in point;—or, what is still more common, the propositions—called by Aristotle "principles"—which have been collected from

them, alone remaining in the memory for use, the experiences from which they were derived being forgotten,—in effect, the vague and idiomatic use of “all” and “every” having, upon all these grounds become familiar and habitual,—Aristotle, or those he improved upon, laying hold upon this, and systematising it, have turned a use and abuse into a reality; and having found one exceptional instance and subject, to which the expression was formally applicable,—though entirely exceptional in its subject-matter and substance,—have enlarged the bare exception into the rule, and made it to constrain and govern as the universal form and method all the universe of thought and knowledge, in which it is itself a mere exception and opposite.

We deal with it in the opposite order and sense; and as Newton applied his universal system and proofs to ellipses in all their infinite varieties, and then showed that a circle—about which alone all others had busied themselves—is in effect only an exceptional ellipse, an ideal exception which nowhere exists in the sidereal universe, namely, in which the two *foci* of the ellipse coincide; so I would show that Analogy and Example are the universal groundwork of all reasoning—in religion, morals, human life and conduct, philosophy, in the animal, vegetable, and mineral,—in both the mental and material worlds, and that Mathematics is only the exception,—the ideal exception, in which, as it were, the two *foci* coincide, and become one: that is, where no doubt, and therefore no use of judgment, exists: for that no longer are there two opinions or probabilities,—as it were the two *foci*,—but there is one example, one idea, a mere identity and coincidence,

between which there is no room for judgment or opinion to intervene ; but that all it admits of is an exercise of apprehension and understanding.

Such is exact demonstrative Syllogism and all the subject of it.

As for Syllogism other than exact, it is all,—even most mathematical demonstration, as has been shown—only analogous to true Syllogism. It is only a loose and convenient pretension to its form ; and an approximation.

CHAPTER VII.

ARGUMENT IS BY A RULE OF THREE SUM.

IN effect, it can be made apparent that many or most arguments may be as approximately reduced to a Rule of Three sum, as to a syllogism.

Take these as examples :—

Ex. 1. “ For both He that sanctifieth and they who are sanctified (*i. e.*, the priest and the people) are all of one: for which cause He is not ashamed to call them brethren.” (Heb. ii. 11.)

As the Priest : the Jewish people :: Christ : the human race.

As the priest is brother to the Jewish people, so Christ is brother to the human race.

Ex. 2. “ For every High Priest is ordained to offer gifts and sacrifices ; wherefore it is of necessity that this man have somewhat to offer.” (Heb. viii. 13.)

As the Jewish High Priest : sacrifice :: the High Priest Christ : sacrifice.

This example is the more illustrative, because the syllogistic form “ every ” is used.

It is a mere analogical argument ; and every analogical argument is a Rule of Three sum.

Ex. 3. As the Mosaic sacrifices gave outward purity, so the Sacrifice of Christ gives purity of conscience.

Ex. 4. As the Jewish High Priest entered into the Holy of Holies, so Christ the High Priest is entered into Heaven.

Ex. 5. As the Jewish High Priest, after entering into the Holy of Holies, with the sin-offering, came back again with pardon to the people who were waiting for him, and blessed them; so Christ, having ascended up into heaven to present His offering for sin, will come again at the end of the world without sin unto salvation.

Ex. 6. "A woman when she is in travail hath sorrow because her hour is come; but when she is delivered of a child she remembereth no more the anguish, for joy that a man is born into the world. And ye now therefore have sorrow. But I will see you again, and your heart shall rejoice, and your joy no man taketh from you."

The whole Epistle to the Hebrews is, in effect, a cumulation of analogies by the Rule of Three. See especially chap. v., verses 1 and 5,—“for,”—“so.”

Every example is a simple Rule of Three sum.

An induction of examples is a compound Rule of Three sum.

Ex. 1. In arguing for the benefit of alternate fasting and feasting:—for that in all animate nature rest and change renew strength; and a shorter rest restores strength for a longer period of exertion:

1st instance: Pulsation: the ictus and remission of the heart.

2nd instance: Sixteen hours' waking and labour: eight hours' sleep.

3rd instance: One Sabbath rest requisite and sufficient for six days' work, in man and beast.

4th instance: The arsis and thesis of the voice: the latter giving rest both to the ear and the voice.

5th, similar: Feet, in poetry,—the ictus and remission of long and short;

Metre also,—the pause after the completion of the verse of so many feet.

6th. The accent at the beginning of every bar in music.

In like manner, in the use of medicine, climate, study and play, half-year and holidays, &c.

Now this is a compound, or cumulative Rule of Three sum. The 1st is,

As the ictus is to the remission of pulsation, so is feasting to fasting.

2nd. As waking is to sleeping, so is feasting to fasting.

3rd. As the week days' work is to Sunday's rest, so is feasting and fasting.

4th, 5th, and 6th. As arsis and thesis are in poetic feet, in metre, and music, so is feasting to fasting, &c.

According as the number of these examples and analogies are numerous, so is the greater likelihood of the benefit of alternating fasting with feasting.

Ex. 2. The doctrine of vicarial atonement supported by types of the Old Testament:—

As the ram in the thicket was offered in lieu of Isaac, so Jesus was offered for the children of obedience and faith.

As Moses offered himself for the children of Israel, so Jesus offered Himself for the tribes and families of the world.

As the sin-offering was slain and its blood offered for the sinner confessing, so, &c.

As the one bird was slain and offered to let his brother bird go free, so, &c.

As the bullock and goat were offered on the great day of atonement, and the goat carried away the people's sins into oblivion, so Jesus, &c.

As David offered himself for the people,—for his sheep (1 Kings, xxiv. 17), so Christ the shepherd.

This is a compound and cumulative Rule of Three proportion.

A fortiori arguments are of the same nature, as, Ex. 1: "If ye being evil know how to give good gifts unto your children, how much more shall your heavenly Father give the Holy Spirit to them that ask Him?" (Luke, x. 13.)

As our earthly fathers are to bread and fish and an egg, so is our heavenly Father to greater and heavenly gifts, viz., the Holy Spirit.

Ex. 2. Luke, xviii. 5–8. As an unjust judge will avenge a woman because of her importunity tardily, so, *a fortiori*, will God, the righteous Judge, avenge those who cry day and night to them, viz., speedily.

Other arguments are as an inverse Rule of Three.

Ex. 1. As the first resurrection is spiritual, and the second is natural, so the first death is natural, and the second death is spiritual.

Ex. 2. As the natural death pronounced at the fall began immediately in diseases, which ultimately end in the death of the body, so the spiritual life which is pronounced at baptism begins immediately, to be completed and consummated in the resurrection of the soul.

Aristotle himself uses the form of a Rule of Three sum in treating of Similitude.

Ex. 1. "We must consider similitude in the case of things of different genera, thus:—as one thing is to another, so is another to another: for instance, as science to the object of science, so is sense to the object of sense; and as one thing is to a certain other thing, so is another thing in another, *e. g.*, as sight in the eye, so is intellect in the soul; and as tranquillity in the sea, so is serenity in the air." (Topics, Bk. i. ch. 17.)

Ex. 2. Again, in his chapter on syllogism and induction (Topics, Bk. i. ch. 12):

"Induction is the progression from singulars to universals,—as, if the pilot skilled in his art is the best, so also is the charioteer; and generally the skilful is the most excellent about each thing."

This literally rendered is neither syllogism nor induction, but a simple analogy. But I question whether the proper meaning be not,—

The skilled pilot is best:

The skilled charioteer is best: &c., &c.

Therefore the universal is proved, viz., that the skilled person is always best in his own art.

Ex. 3. "The wholesome has the same relation to health, as what produces good constitutional habit to a good habit of constitution." (Topics, Bk. i. ch. 13.)

Ex. 4. "As a thing is in these, so it is also in the case of what is proposed."

And, "A point in a line is the same as unity in number." (Topics, Bk. i. ch. 18.)

These being Aristotle's own illustrations, they are

used only to show how he also naturally falls into the Rule of Three form of proportion and comparison.

It is not to be inferred that I would propose the Rule of Three, or formula of proportion, as an actual and efficient form of all argument. It would be more absurd than the syllogism which I deprecate. All that I would suggest is that an artificial system might be founded upon this model just as syllogism has been ; and with similar warrant for it : for it is in common use, and used even by Aristotle himself, who never uses his own instrument, syllogism. And it quite as faithfully represents the process of mind in argument as syllogism does. And both do it only approximately and analogically. It has this advantage, however, beyond syllogism, that it furnishes some sort of measure of the degree of probability : which syllogism does not ; and a better measure than is afforded by the best of his topics of probabilities.

Neither would I contend that Aristotle's *Organon* might not be read by those who had time for it, and who were well advised of its theoretical nature, and limited application, as an exercise of the mind, and for the searching and extensive analysis and exposure of fallacies which it contains abundantly. But I doubt whether any one knowing its use and abuse would go through the time and labour necessary to understand it. The cycles and epicycles of the Ptolemaic astronomy would be a like exercise in mind and mathematics, but no one would go through the lengthy, laborious, and intricate investigation who knew the simplicity and truth of the Copernican system. Moreover, admiration and fondness will grow upon us in favour of a fallacious

system which requires long study to master it, and which has great attractions of beauty and ingenuity in its contrivance and completeness. Taylor made such a study and mastery of the Aristotelian and Platonic philosophers that at length he thought the heathen theology superior to the Christian. I have no hesitation in pronouncing my full conviction that the sceptical theories of the schools of Colenso and the seven essayists are the *necessary* product of the too great use of the heathen classics, and of mathematics, in our schools and universities. I affirm confidently that it would be impossible to educate our youth as is now done in heathen literature and philosophy, and to profess and cultivate such an exclusive admiration of them, and not to produce as a consequence, of absolute necessity, an adulterated and adulterous Christianity. Sir George Rose, in his Christian researches, with more force and truth, calls the Christianity of Christendom an incestuous Christianity.

This will be made to appear more demonstrably, by contrast, through the system and illustrations which will be propounded and prosecuted in the Fourth Book.

BOOK IV.

CHAPTER I.

INTRODUCTION.

LET us then dismiss the Aristotelian and the Baconian Logic altogether: the first, because it is founded in error, and fails in all its objects and pretensions; the second, because its object and application is physical philosophy: the form of which is altogether different from moral and religious habit and inquiry.

It may be thought that I have given more time and investigation to the subject of syllogism than can be required at this time, when no one uses it in his proofs and investigations, or is led by it in his opinions. But this I apprehend to be a mistake. It must be remembered that it is taught in the universities and schools; and taught without warning of its inefficacy and danger. It is also erroneous to say that it is out of use.

The majority of professed reasoners still talk of the syllogistic form as the model and standard; and if they can bring any part of their argument into this shape, they think that they have achieved the highest stage of reasoning. When Ebrard's Olshausen turns

every argument possible in the Epistle to the Hebrews into the syllogistic formula, and a Government Inspector of Schools says that the ninth chapter of Romans may all be thrown into syllogism, it is time for such error to be exposed, if it be error; and it cannot be said that the occasion for such exposure is gone by, and is unnecessary.

I say confidently, that if our clergy have not been perverted in their reasoning and religious notions, it is because they had emancipated themselves from their University education. That it has been because their study of the Bible, and acquaintance with the Bible reasoning, has overpowered and eclipsed the habit of mind which was impressed upon them in the schools. That it has been because Christianity was too strong for heathenism. But I say also, that our clergy have been perverted by their heathen education. It is clear to me, as a student of reasoning, and observer of the human mind, that the critical unbelief, and the philosophical Christianity of the so-called Broad Church among the clergy, together with the scepticism of their allies the philosophers in history and physics, is the *necessary* consequence and conclusion of the heathen system of education prevailing in our schools, and especially in the matter of reasoning and Logic. It takes centuries to work out the consequences of an evil principle in a national system; and they only show themselves palpably in the end, when the constitution has grown old, and is enfeebled, and unable to resist, as in its youth and vigour, the persistent progress of the disease.

The malicious influence of the Greek and Latin classics on religious literature, meets us at every turn.

A now eminent theologian of Oxford failed in obtaining his first-class degree, because he was more conversant with the Septuagint than with classical Greek. An appointed commentator on the Bible would not allow to me that St. Paul's Epistles abound in Hebraisms, and persisted that they must be everywhere translated and explained according to the rules of classical Greek. From this error, and the not acquainting themselves with the Hebrew idioms, both Olshausen, and Conybeare and Howson mistranslate the 1st verse of the 9th Chapter of Hebrews: not seeing that the adjective "worldly" is to be borrowed from the second clause into the first,—*more Hebræo*—and that the translation ought to be, "Then verily the first covenant had also worldly ordinances of divine service, and a worldly sanctuary."

Hence, too, such false maxims as these. "If one day is put for a year, 1000 years must be put for 1000 times 365 years." "To constitute one thing a type of another, the former must not only resemble the latter, but it must have been designed to resemble it in its original constitution." Wainwright, "Christian Certainty," p. 173: with an Example equally bad. Did Mount Sinai resemble Agar, or Jerusalem that now is, by its original constitution? Did seven ears represent seven years, or three branches or three baskets resemble days? Was Joseph naturally a type of Christ, or Sarah of the Church?

From the same error in the form and habit of reasoning proceed such arguments as this: That if the second resurrection is material and corporeal the first resurrection must be corporeal also, and cannot be spiritual;

that if a word is typical in one place it must be typical in all places, and of the same thing; that the Bible must be interpreted altogether literally, or altogether figuratively. By such constraints we abdicate the art and liberty of Scripture interpretation, and make religion the contrivance of dictionary and grammar. Even Ernesti, in his much-approved and valuable "Exegesis," is fettered by this influence; as I shall venture to show in the exemplification which I purpose in the sequel.

Dr. Jebb said openly in Convocation, that he believed that the worship described in Revelations was that now going on in heaven. No doubt he must also believe that he shall walk on actual golden streets in the New Jerusalem, and have his refined taste gratified by the colours of the precious stones of which its foundations are to be constructed.

The following is another example of false religious Logic :

"A late writer," Dr. Chalmers, "contends that 'The examination of the Scriptures is a pure work of grammatical analysis: it is an unmixed question of language.' 'We must admit of no other instrument than the vocabulary and the lexicon.' 'The mind or meaning of an author who is translated, is purely a question of language, and should be decided upon no other principles than those of grammar and philosophy.' 'But this principle has been most glaringly departed from in the case of the Bible. The meaning of its author, instead of being made singly and entirely a question of grammar, has been made a question of metaphysics or sentiment. It has been, such must be the rendering from the analogy of faith, the reason of the thing, the cha-

racter of the Divine mind," &c.—(Andrew Norton's "Reasons," pp. 98, 99, 100, note). Much more might be quoted; and with best profit, A. Norton's exhibition of the absurdity of all this.

Only think of interpreting the Divine mind, and limiting it, by the rules of grammar and philology. Truly St. Paul would have been saved the use of many of his quotations, if he was shut out from considering the analogy of faith and the character of the Divine mind.

Ernesti's "*Institutio Interpretis*" is a good—perhaps the best instruction in Scriptural exegesis. But his editor, at all events, puts himself under the common philosophical fetter when he rejects the figurative and allegorical interpretation of the Scriptures, and limits the recognition and use of types to those which are expressly named in the New Testament. — (Ernesti *Interpret. lib. i. ch. 1, ss. 8 & 10*; translated by Terrot. Ammon's notes).

Let us then say no more about Grecian Logic, the Logic of words, grammatical and philological Logic, the forms of philosophical reasoning, founded upon physical and material nature, figures, geometry, genus, species, property,—such ideas and abstractions as are taken from stones and substances, the visible and tangible world, and vegetable and brute nature; but leaving all these things behind,—to heathenism and philosophy,—let us go on henceforth and at once to the principles of a true Logic, suited to the subjects of religious wisdom, and founded upon and drawn from the only source of such knowledge: though we cannot expect to make more than an entrance into a region so

vast, so unexplored, and so much above, in its height and depth, our unadvanced and worldly natural minds.

More must be done, in future generations, in the opening and the cultivation of this rich and prolific and interminable field. I am able only to endeavour to open the vestibule into it.

When the Greek and Roman Classics, and heathen literature, are no longer made the groundwork of knowledge, and the basis of morals and reasoning and thought—and education has altogether a different character, and object, and standard, and aspiration, and elevation, then this art may be esteemed and brought into use; and being in use, may be prosecuted, and improved, and exercised to its right powers and capabilities, and to its developed proportions.

At present we will only endeavour to point the way to, and according to our little ability, imperfectly illustrate, the opening which has been given to us.

CHAPTER II.

THE LOGIC OF LIFE,—OF MORALS—OF RELIGION.*

It is said by the schoolmen, and generally admitted from their teaching, that imagination has nothing to do with reasoning, and can only distort it; that metaphors, similes, and analogies, are mere ornaments of rhetoric, and used as much for fallacy as for truth; that one would never use metaphors or analogies in mathematics; and that syllogism is the proper instrument of logic, similes of rhetoric.

In this is exemplified the narrowness, the littleness, and worldliness of the philosophy by which the world is swaddled and bound down, and is content to be blindfolded and led. It is shocking and degrading to think that Christian and civilised man, calling himself learned, should never have been able to rise above the logic of the schools, and should be utterly at fault in respect to this the fundamental quality of man, his faculty of reasoning; upon which all his actions, life, plans and purposes, belief, hope, conscience, motives of conduct, principles of character, his happiness and salvation, depend. Let us aspire to take a glimpse into a higher and more extended field; though, of course, we cannot

* Reprinted from my "Excelsior."

penetrate far, or hope to walk at ease and freely in a new region, which has not been trodden, and where paths have not been opened, or are entangled and intricate.

The question is, whether imagination is a faculty of reasoning; and whether metaphors, similes, analogies, parables, types, are a part of logic. Now, clearly, no one would employ metaphors in mathematics; neither would one use mathematical proofs in the business of life. Mathematics are applicable only to physics, and mere matter; and not very extensively to that: as it can be little used in chemistry, magnetism, electricity, composition of colours, pharmacy, cookery. But how very low and inconsequential mere matter is, is seen by the several stages rising successively above it: when we come to organisation—vegetable, animal; to sensation, instinct, mind, reasoning, conscience, soul, the spirit. It is acknowledged that one living thing is a higher work in creation than the whole material universe. What, then, is an intellectual, a rational, a moral, a religious, a spiritual being! It matters not whether it is an orrery or a universe; matter is a mere nothing: which alone mathematics can touch. It cannot touch the lowest acts and operations of organisation, much less of mind. There must, then, be some other kind of reasoning applicable to these. Is not imagination a faculty of this, and similes an instrument of it? What can we conceive of God without imagination? What can we conceive of the future, of the past, without imagination? What can we conceive of religious truth, doctrine, duty,—even of moral truth, duty, and motive—without imagination? How can we pray,

praise, have faith and hope, without imagination? The experience and habit of prayer, and the familiar use of David's Psalms, are the most convincing proofs of the special providence of God. When Spurgeon says,—“Look at the blind man, the lord of creation, when he is led by his dog. Is he not degraded? So when we are led by our animal passions—by the animal part in us—we are degraded from our lofty nature and pretensions:” is there no argument in this? When he says, “Our own works and self-dependence are like a bubble; we see all the colours of the rainbow and the heavens reflected in it, and think we have them all within our reach; but suddenly it bursts, and we find it all empty, and nothing remains of it:” is there no reasoning in this? When it is said, “The path of the just is as the shining light, which shineth more and more unto the perfect day,” is there no legitimate persuasion in this? is there not an efficacy and conviction in these metaphors being true? And are there not false metaphors, which on that account do not equally persuade? as, when they are said to carry the holy pyx up to the high altar, as our Lord went before His disciples into Galilee; and when they say, the two swords which St. Peter showed are the spiritual and temporal power of the Pope; are these not unpersuasive, or fallaciously persuasive?

When Christian virtues are inculcated by likening them to the teachableness of a child, the content and innocence of the lamb, the patient labour of the ox—all which we admire and love; is it not a rational and a reasoning persuasion and proof? And when we compare vices to a ravening, roaring lion, the poison of

asps, the serpent, the crocodile, and other reptiles—all which we are disgusted with and hate—is not the aptness and *truth* of the illustration a reasoning and convincing persuasion? So of the multitudes of other metaphors and types:—God is a consuming fire; Christ the Sun of Righteousness; the Holy Spirit is a wind; the Spirit, like dew, like springing water; preaching, like rain; incense, prayer; saints, stars; the moon, the church; the veil of scarlet, purple, fine linen, and blue—viz. fire, water, earth, air—the four elements of creation,—signifying that the whole material universe at once veils and reveals God to man; that all creation, all nature, all history, all good men's lives, actions and events, are all metaphors, similes, analogies, types, parables—intended to teach and convince us up to heaven and holiness, and wisdom and truth, in all our lives, and knowledge, and principles, and opinions. For this purpose all the universe has been created and adapted, and made one great complicated type and parable; which we are to study and comprehend, and appropriate to ourselves, and use rightly for our self-improvement and right teaching, in all our lives and opinions, and hopes and aspirations.

We can understand now why some animals were created clean and some unclean: they are natural lessons and arguments. Hugh Miller has suggested and shown, that the ugliest types of animals were created just before man, in order that there might exist types of sin and its deformity: such as apes, serpents, eels, &c. We know that at the same time the most beautiful, and amiable, and useful tribes of beasts, birds, fruits, flowers, were introduced: being types of virtues,

and the beauty of holiness. "Go to the ant, thou sluggard." "So works the honey-bee." We see, too, how the Bible is the most perfect argument and demonstration in the world; being throughout a series and collection of parables and types, chosen and arranged in the most admirable order and system: so that we have only to comprehend them fully and rightly, to be taught and convinced into truth, and wisdom, and holiness.

Dr. Wordsworth, in the Introduction to his 'Notes on the Pentateuch,' embraces this subject comprehensively. "Imagination," he says, "is the handmaid of faith. Imagination is the highest faculty of the human mind, apart from revelation; and when it rises into faith, then it overcomes the world. Imagination is higher than reason, though it must be regulated by reason acting reasonably. And one of the clearest evidences of the Divine origin of Scripture, and of its perfect adjustment to the highest faculties of man, is that by such analogies as these it affords the best food for the imagination; and they who labour to mar such analogies as these do not promote the growth of the human intellect, but rather may be said to wither it."*

I purpose to enlarge considerably upon this subject on a future occasion. †

* Introduction, p. 25.

† This occasion is that which I now take in this Fourth Book of the present treatise.

CHAPTER III.

THE LOGIC OF THE BIBLE.*

THE prerogative of man is his understanding. The highest aim of the understanding is to know God. For this we must acquire a refinement of mind, a purity of perception, a spiritual discernment. There is a holiness of mind as well as of heart. But the one cannot exist without the other. Holiness of life is the foundation of that holiness, purity, and singleness of mind which discerns truth in moral and religious things. "He that doeth my will shall know of the doctrine."

Now the Bible is the treasury of both these stores. It has the rule of doctrine, and of life. It has of necessity, and in fact, the model of reasoning, in dealing with these intimate and united subjects. The Bible is the perfect pattern of the method in which holy things, and human nature—which it provides the means of making holy—ought to be treated of. The Bible, therefore, is a perfect model of moral and religious Logic. The opposite is that state of prejudice which leads the mind astray from the perception of truth, and which Bacon calls the idols of the mind. The Bible presents no such idols. For examples:—

* Reprinted from my "Excelsior."

Nothing so incapacitates us from sound judgment in religious argument as the opinion that we ourselves are perfectly right. This incapacitated the Jews; this incapacitates every modern sect. Now, what does the Bible do? Moses and the Prophets constantly condemn their own nation. They do not foster their spiritual pride. They condemn them for saying, "Stand by, for I am holier than thou." They say, "Ye are a stiff-necked people." They say, "Destroy those nations for their wickedness;" but to the Israelites they say, "Not for your own righteousness, but for the wickedness of these nations, I have brought you in." The Prophets speak to the Israelites, and the Apostles Paul, Peter, John, and James, to the early Christians, of their faults and their idolatries. Solomon expels this idol when he says, "Seest thou a man wise" (or good), "in his own conceit? there is more hope of a fool than of him." Again, the crimes of the patriarchs and saints are enumerated together with their virtues; in order that we may not think any men perfect, or venerate them as infallible, but that we may regard human nature as it really is.

This is the very foundation of truth.

The Psalms are a rich and unfathomable mine in the knowledge of human nature, and in the exhibition of its finest feelings and highest sentiments. They are peculiarly an exercise in that talisman of truth, "I seek not mine own will, but the will of my Father," as opposed to, "How can ye believe which receive honour one of another?"

Again, all faculties, passions, sentiments, are enlisted and exercised in their proper place, time, degree,

and method. There is a class of philosophers who say that feelings and imagination ought to have no place, and never be admitted, in reasoning. The reason of man is utterly incomplete and incompetent without them, especially in the matter of religion. Divine things can only be represented by types and parables. What is the use of parables and types without fancy and imagination? Moral truth requires them almost as much; for faith, hope, and charity, are mere metaphors till they have been kindled and experienced in the mind and the heart.

The logic of religion and morals must be active, persuasive, impulsive. What zeal then can be like that of David, when he said, "Is there not a cause?" and when he met the giant with a sling? and when he said, "Who is this uncircumcised Philistine, that he hath defied the armies of the living God?" Or what disinterestedness like his, when he slew Saul's and Ishbosheth's murderers? or greatness of mind, when he spared Saul twice at the danger of his own life, and melted his enemy with coals of fire by rewarding evil with good? Or what amiable emotion was ever greater than that with which Joseph could no longer refrain himself before his brethren, and gave forth his voice in weeping aloud, so that all the house of Pharaoh heard? Or what obedience so perfect as that of Abraham, when he rose up early in the morning; or faith so sublime, as when he put forth his hand and took the knife to slay his only beloved son? or resignation like that of Isaac? or compassion like that of the widow of Zarephath, when she made a little cake for the fainting prophet first, of her last handful of meal and little drop

of oil? or rapture like that of Elisha and Stephen, when they saw, the one the mountain full of chariots and horses of fire round about him, and the other the Lord Jesus standing at God's right hand? or joy like that of Naaman, when he saw his flesh come again to him like the flesh of a little child? What humility like Joseph—"It is not in me!" What meekness like Moses—"Would God all the people were prophets!" And what could ever kindle those passions and motives within the soul like these examples? These all give both impulse and direction; they at once give power and perfection to the mind.

And all these examples are united and exceeded in our blessed Exemplar, the Lord Jesus.

This meekness, humility, unselfishness, singleness of mind, desire not of our own but of God's glory and truth—above all, the enlisting all passions and emotions, subdued, chastened, purified, in full activity, but perfectly directed—opens the mind and the heart for the entrance and reception of the Holy Spirit, and for the operation of faith, as opposed to unbelief on the one hand and superstition on the other.

On the other hand, heathenism and heathen literature—the philosophers and the poets—have a false and perverted taste and style in themselves, and impart it to their readers. Their philosophy was abstract and metaphysical, tending to no practical end; and it led them on only to inextricable confusion.* Their religion and religious poetry were a concession to the baser principles and perverted passions of human na-

* See Lewes's "History of Philosophy."

ture. Even their Logic was theoretical and abstract, and based upon mathematical forms, which are wholly inapplicable to morals and human life. They required arguments and metaphors to be mechanical—to be exact with arithmetical proportion—to run on all fours, like the brutes. This is not Logic worthy of man, who looks upwards.

Now, the Bible is never abstract nor metaphysical; its application is always to human life, and practical. Even its doctrines are mostly taught, and are all illustrated, by examples. The Bible contains ten or twenty examples to one precept. Therefore it is a book of instruction by history and real life. It does not descant upon commandments and laws, but illustrates them. Even sins are not defined, but made hateful by examples and their punishment. St. Paul does not analyse the nature of faith, but says it is the “substance of things hoped for;” that it “worketh by love.” He defines charity by its exercise—“Charity suffereth long,” &c.; and hope by its effects—“Hope maketh not ashamed,” *i. e.* maketh us joyful. Its metaphors are not exact, but have the freedom applicable to human life by a moral adaptation. Its parables, and types, and descriptions, have all of them that liberty and largeness which fits them by infinite and intricate connexion, to all parts of that vast and comprehensive scheme which fills every part of all time, and, as we may say, the whole universe. Lastly, the stretch of mind and heart which endeavours to comprehend this whole is the highest exaltation of the human intellect.

The Bible, then, perfects man’s reason by example and habit; by enlisting and correcting his motives and

impulses. It perfects the intellectual apprehension of man by perfecting his moral sense. It perfects the whole man ; and perfects it for the highest object of his being, which is religion.

The opposite to this arises from a refusal or neglect of the Bible, and the use of human and worldly literature ; still more from the use of heathen religion, philosophy, and morals ; still, most of all, from the use of Holy Scripture itself in a false and perverted sense. The extreme of all this is a judicial blindness, which arises out of a thoroughly distorted moral sense. Such was the darkening of the understanding, the “reprobate mind” of the heathen, described in the first chapter of the Romans. Such was the state of the Jews at the Advent of our Lord, and at the destruction of Jerusalem. Such it was that dictated the casuistries of Liguori, Dens, and Thomas Aquinas, similar to the Judaisms of Maimonides, but worse. Such were the commendations of Dens by Archbishop Murray, and of Liguori by Cardinal Wiseman. Such was the disclosure by the Jesuits of their Constitutions, in supposed justification of their principles. Such was the declaration of the dogma of the Immaculate Conception by Pius IX., going deepest into darkness at the very time when the world is growing more enlightened. Such was the fifth rule of the “Index” condemning the use of the Bible in languages known by the common people, —shutting out from the eyes of the mind, and abhorring and nauseating the very light and logic which God has given to open and enlighten them.

CHAPTER IV.

EXAMPLES OF, AND ASPIRATIONS AFTER, A HIGHER AND RELIGIOUS LOGIC.

“If man is not a creature composed solely of intellect, or solely of feeling, or solely of will, why should any one element of his nature be excluded from participating in the pervading consciousness of Him in whom we live and move and have our being.” Mansel, Bamp. Lect. 4, p. 105.

The following is a good example of religious Logic and Scripture reasoning, from Brown on the Second Advent,* arguing that the millennial resurrection is figurative:

“Need I ask any familiar with the figurative language of Scripture, and the Scriptural figuration of this period, whether the resurrection of the slain witnesses of Christ of every period, to people, possess, and hold the supremacy of the earth with their Lord, be not a conception worthy of the Spirit of God to dictate, and

* 5th Edit. p. 234, ss. This is not proposed as a conclusive argument upon the question discussed, or one which might not be combated by conflicting analogies; but only as an example of the method by which such subjects may and ought to be treated.

inexpressibly refreshing for the soul of an oppressed Church to be filled with? In this very book the figurative resurrection of the witnesses for the truth is thus expressed,—And after three days and a half the Spirit of life from God entered into them, and they stood upon your feet” (Rev. xi. 11).

“It is indeed a part of the classic style of Scripture in depicting this very millennial period. For example: Will the Jews be brought in? ‘Thus saith the Lord, Behold, O my people, I will open your graves, and cause you to come up out of your graves, and bring you into the land of Israel. And ye shall know that I am the Lord when I have opened your graves, and brought you up out of your graves, and shall put my spirit within you, and ye shall live. And I will place you in your own land.’ (Ezek. xxxvii. 12–14). ‘After two days He will revive us: in the third day He will raise us up, and we shall live in His sight’ (Hos. vi. 2.) This certainly is figurative. Again: Will this resurrection of Israel be a mighty blessing to the Gentile world? ‘What shall the receiving of them be but life from the dead?’ As, of the return of the prodigal it is said, ‘He was dead and is alive again;’ and of the change which passes upon the believer in justification, it is said, ‘He shall not come into condemnation, but is passed from death unto life;’ and of sanctification, that he is ‘quickened who was dead in the trespasses and sins;’ so it is said of the Church, ‘Thy dead men shall live,’ &c., just as it is said of the opposite party, ‘They are dead, they shall not live: they are deceased, they shall not rise: therefore hast Thou visited and destroyed them, and made all their memory to perish.’ (Isa. xxvii., 3, 14.)

“ I have said further, that this ideal is current coin in all vivid thinking, in every age, in every language. ‘ When the venerable priest,’ says Merle d’Aubigné, speaking of old John Huss, ‘ was going up to the Council of Constance, and talking of a certain dream of his, of pictures and figures of Christ which the Popes and Bishops could not efface, — “ The nation that loves Christ,” he said, “ will rejoice at this, and I, awakening from the dead, and rising so to speak from my grave, shall leap with great joy.” ’

The following is from Norton’s “ Reasons,” pp. 90, 91 :

“ It is to the intrinsic ambiguity of language that the art of interpretation owes its origin. If words and sentences were capable of expressing but a single meaning, no art would be required in their interpretation. It would be, as a late writer” (Dr. Chalmers, in the passage above quoted), “ thoroughly ignorant of the subject, supposes, a work to be performed merely with the assistance of a lexicon and grammar.”

“ The art of interpretation (Exegesis) enables us to determine the *actual* among the *possible* meanings, by directing our attention to all those considerations which render it probable that one meaning was intended by the writer more than another.

“ Some of these considerations are, the character of the writer, his habits of thinking and feeling, his common style and expression, and that of his age or nation,” &c.

F. W. Robertson makes very many aspirations and reaches towards a higher Logic of religious application and investigation. The following are selections from his discourses.—

“All science removes the cause of causes further and further back from human ken, so that the baffled intellect is compelled to confess at last, we cannot find it. But ‘the world by wisdom knew not God.’ There is a power in the soul* quite separate from the intellect, which sweeps away or recognises the marvellous by which God is felt. Faith stands serenely far above the reach of the Atheism of science.† It does not rest on the wonderful, but on the eternal wisdom and goodness of God. The revelation of the Son was to proclaim a Father, not a mystery. No science can sweep away the everlasting love which the *heart* feels, and which the intellect does not even pretend to judge or recognise.” (F. W. Robertson’s Sermons, 1st series, pp. 230, 231.)

“They must be understood by a living heart; a cold, clear intellect will make nothing of them.” (Ib. p. 285, Sermon on the Good Shepherd).

“In all matters of eternal truth, the soul is before the intellect.” (Ib. 298.)

“All Christ’s teaching is a divine poetry, luxuriant in metaphor, ever flowing with truth too large for accurate sentences: truth which only a heart alive can appreciate.” (Ib. p. 288.)

“Heresies have chilled the poetry of the soul, kindled by the seraphim, into prose. For example: ‘This is my body’—‘I am the good Shepherd.’ In the dry and merciless Logic of a commentary, trying laboriously to find out minute points of ingenious resemblance, in which Christ is like a shepherd, the glory and the tenderness of this sentence are dried up.

* See *post*, The Religious Faculty.

† See *post*, What Faith is,—and, Faith and Reason.

“ ‘I know my sheep.’ A common explanation is, He knew by His divinity. Not so: He knew by the heart, and by love and sympathy.” (Pages 292, 293.)

“So, ‘I never “knew” you.’ ‘God is love.’ ‘He that saveth his life shall lose it,’ &c. ‘All things are possible to him that believeth.’ ‘The Sabbath was made for man,’ &c. ‘God is a spirit.’

“Now the wise men of intellect and logical acumen wanted proofs of these truths. Give us, said they, your credentials. ‘By what authority doest thou these things?’ ‘How can we be sure that it is not from Beelzebub?’ Wise Pharisees said, ‘Give God the Glory.’ But the Samaritans *felt* the life of God. ‘Now we *believe*—because we have heard Him, and *know* that this is indeed the Christ.’

“The Shepherd had come, and the sheep knew His voice.

“Brethren, in all *matters of eternal truth, the soul is before the intellect.*” (Pages 297, 298.)

Of this advanced Christian in mind and reasoning his biographer records:

“And this youthful chasteness of spirit was never stained in life. It is impossible not to feel that to this he owed his keen insight into moral truth, the lucid power with which he solved spiritual problems, and points of the heart’s casuistry, that clear analysis of apparently conflicting truths, which men said came upon them like a revelation, and the bright and tender sympathy and penetration with which he recognised the good, and by which he recoiled from the evil of the men he met.” (F. W. Robertson’s *Life*, by Stopford A. Brook, p. 52.)

CHAPTER V.

WHAT WE CANNOT KNOW : AND MUST REASON UPON
ONLY BY ANALOGY.

IN my First Book I made some analysis and investigation of what things we did not know,—and which must be brought to us by testimony, and second hand ; and of what things we could not know,—and must be brought to us by revelation, and received by faith.

We must pursue this point somewhat farther in this stage, and with reference to our present subject, viz. : moral and religious wisdom, and the highest objects of human inquiry and reasoning : with the view of showing how such subjects, and how these vast, and highest, and all important subjects, can only be investigated and dealt with by analogy, and illustrated by metaphor and parable. The former illustrations were chiefly from physical nature, and the objects of the external senses : though we stepped somewhat out of that limit into our present region. We must now carry our illustrations somewhat farther.

It is of the utmost moment that we should understand the nature and limits of our knowledge, for we cannot without this address ourselves to it to any good purpose ; and it is obvious that what cannot be directly known, can only be judged of by comparison with what

is known, or can be known, that is from analogy with such things.

As we before observed, we cannot find out the principle of life: anatomy and the microscope cannot perceive it, or penetrate to it. It is left as far from our perceptions as ever by the very minutest investigation. For there is organisation and life itself in living beings as small as the smallest atom of which we can obtain a perception by either process. We cannot arrive at the operating principles of chemistry, of magnetism, of electricity. We can only illustrate one by the other analogically. We cannot connect muscular motion with the will, and trace it from the brain to the foot or hand, through the nerve, except by analogy,—as of electricity through a wire or other conductor. Less, if possible,—if there is a proportion in utter ignorance, can we conceive and explain the production of thought in the brain; except by the analogy of some physical production or growth, or animal secretion: the process of which is equally unknown.

The production of being, of life, in a newly-begotten babe,—the origin of a new, a distinct individual,—self-conscious of its own personalty,—body, mind, and spirit,—having its own proper and peculiar form, disposition, character, responsibility,—to live for ever,—can any one know, explain, or understand this? The same thing exists in every animal production, in all life: except in its immortality. And can any one explain this difference between the lives of animals and men? Can any explain or analyse the difference between reason and instinct? The same, in lower degree, exists in vegetable life. Can any explain any of these

except by analogies the one from the other? How much more then is our knowledge inadequate when we come to the difference of the several senses,—sight, hearing, touch, taste, smelling! There are symptoms that some of these operate through vibrations. Some effects are symptomatic that all are of the same kind; and even that one sense may be morbidly turned into another: that all are vibrations. Analogy immediately steps in to aid the investigation: all depends and suspends itself upon similitude and analogy. But what are these vibrations themselves? and how do they affect and inform the brain,—the mind? Analogy must be busy again; and waves of light and sound are compared with waves of water; and these with oscillating pendulums and springs; and so on, and so on. But we are never a whit nearer the ultimate work and worker of the thing: “No one can find out the work which God maketh from the beginning to the end.” (Eccles. iii. 11.)

How much deeper and more difficult is the investigation of the mental faculties,—apprehension, memory, reason, imagination, invention, comparison, conception, causation!—how much more still the affections, passions, emotions, appetites, propensities, dispositions, and character—which is the composition of all these! We name them only and conceive of them by analogy with outward things:—apprehension is from laying hold: memory from a monument: reason from proportions of things: imagination from a likeness in substance or shadow, etc.;—passion from outward feeling and suffering: emotion from moving out of one’s rest: appetite from running after: conception from the first embryonic animation. “Disposition,” and

“character,” furnish equally obvious examples; and the experience is more obvious in the original languages from which these words are transformed.

What can we penetrate into idiosyncrasies of character, of opinion, and even of bodily constitution? We conceive and name them only as we would peculiar mixtures of chemical compounds and elements.

Even in healthy and diseased action, what do we know of pulsation, respiration: of sleep and waking: of refreshment by sleep: of dreaming: of strengthening by exercise: of improvement by habit? All these are dependent upon analogy, and metaphor, and simile, for illustration and elucidation.

Then, for the moral faculties: the sense of right and wrong: the religious faculty: the conscience: the comprehension and recognition of the spiritual: the superhuman: the immortal: the divine: the eternal: the creative: the providential: the retributive: the resurrection from spiritual death to a new life in this world; and another and different resurrection for mortal death to another and higher life of immortal being in another world, of eternal reward and punishment. In all these we must be bewildered, and lost, and distracted,—even with the help of revelation and inspiration, except for the links, and chains, and attractions, and assimilations, and harmonies, and sympathies, and symphonies, of example, and simile, and type, and parable, and allegory, and analogy.

Even why impact produces motion, and force produces effect, are things unexplained and incomprehensible. Magnetism, electricity, gravitation, — chemical election affinity and equivalent, — are operations only,

and facts, and unexplained. Heat, and cold, and attraction, are only effects : as it were the life of inanimate nature. Substance, matter itself is only known by its effects ; and its real existence is more and more doubted. What then could we hope to know actually of animal life : of intellectual life : of the mind, soul, the spiritual life : of man, God : the angelic, the divine nature ?

God's existence is conceived only by analogy. I think, I feel ; therefore I am. Feeling and thought are our conception of existence. Therefore we say God thinks and feels. But what conception can we have of God's existence except by this analogy ? for God cannot think or feel at all in the same way that we do. In like manner " God's passions are analogical." (Bp. Browne.)

Creation is comprehensible only by analogy from human operation : contrivance in the material universe by man's ingenuity and workmanship : Providence by man's care and management : God's love and wrath by man's affections : God's scheme of redemption and reconciliation by man's practices and moral sense ; God's wisdom by man's forethought : God's justice and judgment by man's laws, and retributions, and ordinances.

If our knowledge and apprehension is so limited in the lowest operations of creation, in the material and inanimate world, what must it be, and is, in these the regions of life, of sensation, of thought,—of mind, soul, spirit,—the moral, the religious, the angelic, the divine nature, government and working ?

As Westcott says, " Exactly as the subject rises to

a nobler elevation our knowledge becomes more incomplete. Completeness indeed is but another name for ascertained limitation. The grandest and highest faculties of man are exactly those in which he most feels his weakness and imperfection. They are at present only half-fulfilled prophecies of powers which, as we believe, shall yet find an ample field for unrestricted development." (Westcott, 'Gospel of the Resurrection,' Introd. § 13.)

Therefore it is that all divine teaching is, and must be, by parable, and analogies drawn from human nature. And the use of human language, which is grounded in metaphor as regards all things not simply sensible, as expressive of divine things, is necessarily parabolical. Another qualification is, that these parables and metaphors grow and change with the mind as it rises higher; and thus more nearly and nearly fit and express the divine ideas which they convey. Through this it is that language and parable become the suitable instruments to both the lowest and highest spiritual intelligence.

Let us now examine and contemplate the great parable and analogy of creation.

CHAPTER VI.

ANALOGY OF RELIGIOUS WISDOM : MAN THE TYPE OF
CREATION.

THE groundwork of all reasoning in morals and religion is,—that man is created in the likeness of God : —that the whole creation, spiritual, moral, physical, is created in the likeness of God :—in the likeness of man therefore. Therefore man is the microcosm.

Man's body, as well as mind, are related to the whole universe : therefore to God.

Man therefore comprehends God in and through the universe. As St. Paul says (Rom. i. 19, 20), "That which may be known of God is manifest in (to) them, for God hath showed it unto them. For the invisible things of Him from the beginning of the world are clearly seen, being understood by the things that are made, even His eternal power and godhead." And as the "Christian Year" says,

" There is a book who runs may read,
Which heavenly truth imparts ;
And all the lore its scholars need
Pure eyes and Christian hearts.

“ The works of God, above, below,
Within us, and around,
Are pages in that book to show
Where God Himself is found.

• • • • •

“ Two worlds are ours —’tis only sin
Forbids us to descry
The mystic heaven and earth within,
Plain as the sea and sky.”

God reveals Himself therefore to man in the universe: in all creation,—physical, moral, intellectual, spiritual. One great and leading instance is enunciated in the sentence, “The wind bloweth where it listeth, and thou hearest the sound of it, but canst not tell whence it cometh.” “So also the Spirit.” The same may be followed out now in electricity, magnetism, heat, chemical election and action, the phenomena of life, vegetable, animal, intellectual.

But especially God reveals Himself and His ways in man’s moral nature, his habits, practices and institutions,—growing out of, and formed on, and adapted to the requirements and exigencies of society and societies: the actions, dispositions and practices of men in their several relations, as love to one another, giving good gifts to their children, to each other for importunity: with what measure ye mete: judge not and ye shall not be judged: the meek shall inherit the earth: blessed are the mourners:—so, God is compassionate, merciful, angry, jealous, repents, is placable; God rested on the Sabbath; God lived and walked on earth among men God-man; He is our Father:—so God promises, covenants, swears, rewards, punishes, forgives, purchases, redeems, is reconciled by vicarious

atonement, places and deals with man as in a state of probation. So even in the animal creation, the man, the lion, the ox, the eagle, the lamb, the little children : in the vegetable, the cedar, the myrtle, the box, the pine-tree, the hyssop, the vine, the mulberry-tree : in the material, the mountain, the valley, the river, the sea, the land, the gold, silver, brass, iron, the diamond, the topaz, the amethyst, the jasper, the amber, the fire, air, water : numbers and their involutions even :—so the history of man and of the world : especially the true and faithful history, as in the Scriptures,—its types and parallel events : the word written in short : the word written and incarnate,—are all expressions and teachings of divine things, and communications of God to man.

One of the great revelations of the Word Incarnate is, that God deals with man upon the principles of human life and conduct ; and that there is a perfect analogy between God and man in this respect : that the ways and maxims of men are the ways and dealings of God. Therefore Christ speaks so often, in teaching us divine things, in human maxims and proverbs : —Judge not, and ye shall not be judged : with what measure ye mete : ask and it shall be given you : he that seeketh findeth : he that is not against us is with us.

Theodore of Mopsa strongly expresses this conception, or what is a very near approach to it : —
“ Man, as in fact the very notion of an image implies, was destined to manifest God, who was represented by him, as by an image, to the entire creation. * * * The Creator, after He had embellished the world with His

manifold works, finally produced man as His image, to bind together all the works of creation by their common reference to man's advantage. * * * Thus man was to form the common bond of union for the whole universe. Both worlds are knit into fellowship by the union of soul and body." And again: "God formed man with a view of uniting the visible with the invisible in one, and made him, as it were, a pledge of harmony in the universe."*

But the analogy must be a corrected analogy. To be perfect, it must be an analogy with man's better, his regenerated nature. Man's nature being fallen, it became necessary that God should educate him up to his true normal state again. Therefore the analogies are imperfect. God laying hold of the best analogies which the history of the world affords, and which are chiefly to be met with in the family and race which He was educating gradually up to be the fit foundation of Christ's kingdom, and the receptacle of Christ Himself, the divine perfection revealed, incarnate in the world,—recorded these in the Bible in their imperfect superiority, and He added to them others preparatory to, and most consistent with the scheme of redemption and regeneration to be worked out, in the sacrifices and ceremonies and civil institutions of the Mosaic Law, and ordained significant types, constantly interpreting, and spiritualising, and applying them by the prophetic spirit. So that the Bible has become the depository of the true and sufficient analogies upon which Christianity and true

* Ap. Neander, 'Ch. Hist.' vol. iv. p. 411, 412, Bohn's ed.

religious wisdom is founded, and according to which the divine scheme of redemption and regeneration has been and is to be carried out, and man is to be brought again and recreated to the real and actual likeness of and oneness with God. To this end, and in fulfilment of this truth, Christ came at length,—perfect God and perfect man, the perfect image of God in human nature again,—and united man and God together by perfect and complete analogies.

The effect of this is, that man's own consciousness is the groundwork of all moral and religious reasoning. As man could not reason with man except upon the ground of a common experience and consciousness, and of a community of ideas and language, so God could not communicate with man, and man could not receive instruction and revelation from God, except upon the basis of common feelings and thought. And man being in likeness and harmony with God,—and in proportion to this harmony,—this communication is true and intelligible, and the reasoning is through just and real analogies. And these experiences and analogies must be first in man, and his sense and conception of God and His law must be first from himself and in himself; and his model of God must be himself,—be that of a God incarnate. Man, the centre of the universe for himself, a compendium of the universe, a microcosm, being in strict analogy with God, as he is with other men, founds all his reasoning and recognition of human and divine things, and founds them rightly, necessarily, upon himself. Therefore his conception, belief in, and knowledge of creation, contrivance, providence, freewill, foreknowledge, compassion,

hearing of prayer, forgiveness, punishment, reward, change of purpose, plan of operation, miracle,—are derived from himself, and analogies of his own acts, and experience, and consciousness.

But man's consciousness even may be perverted and false: partaking of the corruption of human nature. It further requires therefore to be educated and nurtured up again to a perfect conformity with creation and the Creator: in order that the analogies which are found in Him, and which he finds and recognises in himself, may be true analogies; and that the reasoning founded on them may bring him nearer and nearer to a knowledge and acceptance of the truth. And these relations, as in all the operations of nature, reciprocate. A just knowledge of himself disposes him more and more to an appreciation of the Scriptures and Christ, which are the medium of God's revelation and reasoning; and study of the Scriptures and Christ, and obedience to their example and precepts, bring the mind more and more into conformity and perfect analogy with God's works and ways. As, for example, the principle of vicarious satisfaction, for love's sake, which is consistent with the truest and purest principles and motives of human nature, is continually impressed by constantly recurring types, both of ordinances established, and of human institutions, actions, and occurrences.

That vicarial atonement,—the keystone of God's dealing with man,—is strongly founded in human analogies, is found to be forcibly illustrated even in the heathen world and profane history. Codrus sacrificing himself; Scaevola, Cocles, Regulus; Curtius leaping

into the gulf; and the Judge, who caused one of his own eyes to be put out, to save one of his son's,—are instances of this. But it enters into and shows itself in all the relations of public and private life. (See Erskine's "Freeness of the Gospel.")

Man therefore, being a microcosm,—in the likeness of God and creation, and in proportion as he is in that likeness, has in himself the materials of truth and wisdom in all great questions, heavenly and human; and there is no other foundation. It is all grounded in the right knowledge and use of his own consciousness and experience.*

There is another consideration which is necessary to complete this view, namely, that the Bible alone furnishes the true and sufficient analogies, and is the only proper and necessary groundwork of a religious Logic.† It is notorious how sceptical philosophers dislike the Bible, and depreciate it as an authority, in history, in philosophy, in wisdom, in morals, in truth even, upon all occasions. This is but natural and necessary, in respect to the book which contains the

* "We are not called upon to live two distinct lives. The relations to and dealings with our neighbours, and their dealings with us, are analogically, and morally, and practically, our relations to God; and love to God and to our neighbour are not separable, but are of one kind morally and religiously." (Mans. "Bamp. Lect." pp. 129–32.)

† I have always found the Psalms the most instructive book in the knowledge of human nature, and furnishing the most full and useful analogies of life; and that of human life in the most perfected moral and religious form existing in the Old World. The precepts and pattern of Jesus Christ, as exhibited in the New Testament, carry the wisdom, laws, and example of human nature to perfection.

principles, the precepts, the histories and events,—typical, prophetic and preparatory, which were to be the foundation of Christianity,—if St. Paul says truly, the wisdom of God is foolishness with men, and the Gospel is to the Greeks foolishness. The point then to be considered now is, that the Bible is the only true history.

There are two sources and streams of history of the world, which are totally distinct and opposite:—the Scripture history, and profane history. Profane history is history according to a human and worldly view, and modelled upon the principles of worldly philosophy and morals: of fallen human nature. Its philosophy of life and morals is upon the same scale of wisdom as its cosmogony and mythology; and it records the lives and actions of men with one-sided admiration and eulogy. The Scripture history is rational and sublime in its cosmogony, and in its record of man takes the moral and religious side of his history. It relates how the world is physically, morally, and politically founded; and traces from its origin his miserable and unhappy condition, and proneness to sin. After that it gives the detailed and domestic history of one family especially, elected and visited by God, and by Him educated step by step into higher and higher knowledge and understanding of His ways and will; and in one and more individual examples, into a better performance of them. Their private lives are laid bare; their failings and weaknesses are recorded in a true and impartial and heart-searching delineation of their character. Where, in a mere historical sense, should we be, without the history

of creation,—of the beginning of evil,—the history of the division of languages,—the distribution of families and nations all over the world,—the great distinction of races in Asia, Europe, and Africa,—the exact chronology, generation by generation, from the first man down to the commencement of profane history five hundred years before Christ,—and to the birth of Christ? Without these the world would be in a perplexity and maze respecting everything fundamental; and would have been relegated to the guesses, and conflicts, and fluctuations of philosophy and theory.

Not only the past world is accurately planned and portrayed, but the future of the world is also pictured and set forth by prophecy, and type, and parable, and figure, and enigma of numbers and imagery; and every attraction and indication which could lead up to the great conclusion and future of the human race, in its ultimate redemption and regeneration.

The Hebrew history is the history of man in his highest character and relation: in his relation to God, and another world,—the end of his existence here, and in comparison as it were to the whole of his life and being. It is the history upon which Christianity is founded, and without which it cannot be understood, or reasoned upon. The Hebrew history is the one genuine history of the world and mankind; every other is but a caricature: is a political, partial, worldly, superficial, and perverted history.*

* Keble expresses this idea with his usual force and truth:—

“The Historic Muse (*i. e.* profane history), from age to age,
Thro’ many a waste heart-sickening page,

It is the pre-eminence given in our universities and schools to the study and appreciation of heathen history, and manners, and taste, and mythology, and reasoning, which has caused the unbelief and heathenism in our Church. The corrective would be, the open profession and inculcation that, of the two parallel histories, the Bible alone contains and furnishes the true genuine record of mankind, and that it ought to be used as the proper foundation of our knowledge and habit of mind, and ideas, and reasoning, historically, morally, and religiously. These ideas and habits of thought and reasoning are quite different from those which we derive from profane history and literature: being true moral and religious ideas and modes of thought,—formed in contact with, and under the teaching of, divine wisdom.

I say, therefore, that the Bible is the only real and genuine history,—alone to be received as the true record of mankind, opposite and opposed to profane history, and to be regarded and studied as the alone sure foundation and fountain of a proper moral and religious Logic.

Has traced the works of man ;
But a celestial call to-day
Stays us, like Moses, on our way,
The works of God to scan" (*i. e.* in the sacred history
of the Jews). *Christian Year, 5th Sund. in Lent.*

CHAPTER VII.

WHY THE COMMON PEOPLE ARE THE BEST REASONERS
IN RELIGION.

“THE common people heard him gladly.”

“Have any of the rulers believed on him?”

“This people that knoweth not the law are cursed.”

Sir William Jones said, truly, that mathematical reasoning was dram-drinking; and that it unfitted men for reasoning well in morals and religion.

A philosophy-minded man, and a freethinker, said to me, that the merit of Logic and Mathematics is, that it makes men accurate.

I have already illustrated the point, that morals and religion do not admit of accuracy. There is no exact definition of passions, feelings, affections, ideas, character, motives: they are such as each one conceives and has experience of for himself. Dugald Stewart employed two quarto volumes in defining the word “beauty.” It is with individuals as with nations, societies, and races; each one has its own code of morality, its own habits and maxims of opinion and thought. In medicine, politics, policy, trade, social dealings, and trust, nothing is fixed, certain and accurate; most is tentative, conjectural, and approximation to certainty.

In arguments, the highly taught man looks for

accuracy and exactness in metaphor and analogy: the argument must run on all fours. Whereas, in Scripture illustrations, parables and types, the strong point only is available; the rest may be inapplicable, opposite, contradictory. Samuel's mantle was rent; but it was Saul's kingdom that was signified. Jeroboam's new garment was divided and partitioned; but it was Solomon's splendid dominion that was to be distributed. Abraham's son was offered; but it was the ram from the thicket that was slaughtered, and made vicarial; so that the two must be put together to compose the type of God the Father offering His Son as a vicarial atonement. The unjust steward is commended for his prudence and worldly wisdom; but his morality is not held up for approval or imitation.

These salient points the unsophisticated mind freely grasps and apprehends, and feels satisfied and convinced by them; while the educated and accurate mind requires something more exact and squared, and less partaking of the imaginative.

The Pharisees and Sadducees were of the most highly educated classes. Philosophers now,—geologists, antiquarians, anatomists,—some of those who witness the most wonderful constructions and contrivances, even of animal mechanism, lean to scepticism. The natural mind would feel persuaded by Paley's argument from a watch; being satisfied that the man who found it would be convinced at once that intelligence had created it. A sceptic, making a nice distinction, has argued that the person so unacquainted with watches must be a savage, and that the savage would not be so convinced; for, he

contended, he would think that it had grown there, and preferred the conclusion that the world had come of itself. And further he said, a watch is a more perfect machine than a man, because it always serves a good purpose and never does mischief. In both which objections he takes a false issue; and both are full of philosophical fallacies. For if the savage should say so, he would say it only from want of experience, having often seen curious things grow, but never having seen the curious contrivances of machinery. If it were a very superior pattern of a bow and arrows, it might be more convincing to a warlike savage.

In an actual case, an Indian did really throw down a watch when he heard it tick, supposing it to be a live thing. The false analogy which he drew was truer than the sceptic's: for he believed in something animated and mysterious, that is, beyond his experience; and upon explanation he would acknowledge the superior intelligence of the Creator. He would recognise the general force and application of the analogies, which are as complete as analogies are in their nature; for analogies are never exact, for then they would not be analogies. Whereas there is no analogy or example of intricately contrived things that we know coming of themselves.

Next, he did not perceive that it is a higher machine that, if it can go wrong, has also in it the means of self-rectification and improvement; and is also not only a thing contrived, and suited to the highest uses and ends, but is also capable of examining and comprehending its own contrivances,—is also itself a contriver.

The objector is captivated in his own subtlety. The distinction of being able to do mischief is an unsubstantial distinction, and not to the point in the question of designer or no designer; and is quite overbalanced by the analogies of contrivance, and intricacy, and adaptation to its work.

The explanation is that the acute philosophical mind is prone to subtleties and distinctions. The unsophisticated mind is given to observe resemblances, the scientific mind to discover differences. Thus the anatomist and physician may be more observant of aberrations of structure and of disease, and form conclusions from them, without being equally observant of the uniform and still more wonderful energy and operation of health, of life itself, which has within it the more mysterious and miraculous power of healing injury and disease, and maintaining itself.

Paley's analogical argument is unanswerable, and is entirely convincing to the unsophisticated mind. It is only the refinement, and subtlety, and conceit of philosophy, that find and approve distinctions that can weigh against it.

Such is the Sadduceeism of science and technical education. Our high education is Grecian; and to the Greeks the Gospel is still foolishness.

The common mind has a wonderful appetite and aptitude for allegory, which is analogy; and as such is never accurate and exact: otherwise it would not be analogy. And parable, which is the necessary vehicle of the highest religious wisdom, is allegory and analogy.

“It (the tract ‘Le bon berger’) was a simple allegory,

and a fresh proof of the power of allegory over the common mind. It depicted the tender love of Christ to a lost sheep,—His living to seek it, and dying to save it,—in a style particularly calculated to please the French.” (“The Book and its Story,” p. 368, ed. 1867.) “The Pilgrim’s Progress” is the great standing example of the power of allegory over the common mind. But allegory has not such power of conveying truth to the highly-educated mind; which looks for greater scientific accuracy.

The æsthetic religionists are among the most highly educated. Artistic taste is, as I have said before (Book II. pp. 343–348), intellectual passion. If over-indulged in, it becomes intellectual vice and dissipation. *It* also is dram-drinking. Every subject and pursuit is becoming sensational and morbid in the present generation. Novels are sensational; history is sensational; philosophic lectures are sensational; amusements are sensational; religion is sensational; the habits of life and manners are sensational. That which characterised and was confined to the theatre is now become the habit of every-day life.

But this sensational rage is in the upper and highly educated classes. The common people are not given to habitual dram-drinking in the business of life and recreation. In athenæums and mechanics’ institutes, music, theatrical recitations, laughable penny readings, and buffooneries, are alone satisfying. In working men’s institutions they are better pleased with sober sense and instruction. The readings chosen and used by the men themselves are of a substantial and useful kind. Sensationalism, in all its perversions

and perturbations, is among the most highly educated classes.

Again, scientific people are inclined to disbelieve what they cannot understand and explain. Physicians do not appreciate herbs and simples, the operation of which is slow and uncertain. The common people find these out, and use them patiently, with occasional great success. The common people find out the virtues of a particular well for rheumatism or the eyes; but physicians take no notice of these. They do not believe the influence of the full-moon on lunatics; for the use of such knowledge is out of their sphere, and the effect is not measurable and reducible to formula. Gaolers, masters of workhouses, and friends, do recognise the influence. There is faith in all this. But faith is not consistent with science. The pride of science casteth out faith. Miracles are unintelligible and unscientific. The common and natural understanding receives them; the scientific does not. There are many false and fanciful ones which are disproved; therefore all are rejected. The common mind believes some that are fictitious. But which is nearest to the moral and religious truth,—the one who receives more than are real, or the one who, in rejecting all, rejects some that are real with them? The man of science finds out that the phenomena of some miracles may be explained, and he pronounces at once that there are no miracles or interruptions of nature; let alone his general conclusion that there have never been,—there cannot have been any miracles,—even those which he cannot explain. He is blinded so as not to notice the additional circumstance, that the miraculous operation

was commanded or prophesied ; and that this concurrence makes the essential distinction. The common people do not distinguish. They see the two together, the wonder and the prediction ; and they recognise and approve a miracle in the whole : not distinguishing whether it be in the work or the worker, or both together ; and their disposition to admire and wonder is satisfied. They have no pride of science to hold them back, or to make them unwilling and partial. The wise and learned man never wonders and is surprised. But where your treasure (labour—skill) is, there will your heart (thought, reasoning) be. The philosopher esteems most his discovery of nature's operations and laws, and he fails to regard the moral and divine operation and use in the occasion and prediction ; which it is that makes the essential difference, and warrants, and approves, and pronounces the miracle.

The common people have a shrewd observation and understanding of weather, and seasons, and discernment of character. But these are uncertain and only for the most part. Therefore science is shy and mistrustful ; and, while it is discussing rules, loses the nice sense and practical experience of weather which farming people obtain ; and while it is digesting each character according to the divisions of phrenology, loses the fine sensibility and tact by which alone character is apprehended and appreciated. The scientific Saxons are no match at all for the Hindoos in the discernment of character.

Of consequence the scientific mind coldly recognises and accepts the operations of the Holy Spirit,

which is occasional and unequal in its workings; and in like manner prophecy, which is enigmatical and abstruse, and of infinite variousness in its manner and its form; and is double, doubtful, and uncertain in its interpretation.

“The common people heard Him gladly.” But the Pharisees and Scribes could not receive Him, because of their Talmudical learning and scientific, humanly-contrived systems. “Have any of the rulers,” they said, “believed on Him?” “But this people, that knoweth not the law, is cursed.”

The Roman Catholics, in like manner, say that the Bible is a difficult book, because of their scientific theology, and intricate and interwoven system of Christianity; but to the people it is easy, plain-speaking, and convincing.

The scientific mind is always asking for definitions; whereas in matters of human life, definition is impossible. There is no exact definition of any passion, faculty, virtue, vice, habit, duty. Faith, hope, charity, conscience, soul, spirit, life, reason, law, truth, the supernatural,—these are all used in different senses and applications; and it is only philosophers and theorists who endeavour to define them accurately. Dugald Stewart, as said before, employs two quarto volumes in defining the word “beauty.” Religious wisdom never defines; it employs words in the sense in which they are commonly used, and differently according to the subject and matter in hand, as all ordinary people do. “The world” is sometimes the kingdom of Satan, and sometimes the general society of men, good and bad alike. “Heaven” is sometimes the realms of the blessed;

sometimes the air; sometimes the whole material universe.

So in its metaphors, the lion is the Messianic king, or the king of terrors; fire is love, or deity, or the instrument of trial or punishment. Virtues and vices are described by their fruits and acts. The fruits of the spirit are love, joy, peace, gentleness. Charity envieth not, is not puffed up. The works of the flesh are, adultery, fornication, wrath, strife, murders, drunkenness, revellings. These are all practical, not scientific; and are intelligible, sufficient, and convincing to every untutored understanding.

It used to be scientifically argued that we might trace up the operations of nature, step by step, to the first cause. But this has been found to be fallacious; and the consequence is that it has left many philosophic minds in scepticism. It is not true that tracing motion to muscular contraction, muscular contraction to nervous influence, nervous influence to the brain, brain to the will,—that thus we rise up to the divine power or will. The mind and will are just as far from God as the first motion was. We cannot trace the geological conditions of the world, the changes, volcanic agencies, deposits, and preparations for man, of millions of years, and back still through a liquid chaos, or gradually glomerating, condensing, universal vapour, the construction of the solar system and universe, back to the Creator. These steps to the Creator fail, and have been falsely urged; and philosophers finding this, and thinking that these the best arguments had failed, and that there could be no better or other, have been confirmed in scepticism.

The common understanding not looking for scientific proofs, and overleaping these inextricable paths and labyrinths of philosophy, rises straight from the analogy of man's power and will to the Creator; whom we can only reach by analogy or revelation; and sees Him demonstrated by the only demonstration of which the subject is capable.

Other examples of definitions and distinctions, destructive of religious wisdom, which science and the world delight in, are in the separation of the human and divine life of Christ: so that every one is now writing a life of Christ according to its human aspect. Again, secular learning is distinguished from religious learning. In consequence, politicians are proposing to teach secular learning alone. Of course science only rises high enough to comprehend the secular and the human. The Library of Useful Knowledge Committee determined that religion and scriptural learning were foreign to their object. So, all knowledge was pronounced *useful* except religious knowledge. When at length they published a Bible, it was a pictorial Bible, illustrating everything but its religious aspect. It was the dry bones of the Bible. Was ever anything so illustrative of death, the dry bones, the skeleton on a pale horse?

Lastly, the scientific mind is critical, is busy and happy in the search of doubts and difficulties. It is exercised in these, and prides itself in them, and its ability in discovering and discoursing on them. This discernment is the offspring of education, skill, and knowledge. It is the privilege of learning. The common mind is humble, ready to be convinced, and conscious of igno-

rance, and tests things more by the moral than the metaphysical reason of them. Learning is proud, and aspires to be all-knowing, and does not readily admit of a new thing unless it fits in with its previous conceptions. A new thing, much more an inexplicable thing, is an invasion of its empire of wisdom and knowledge, of its prejudice and pride. And no prejudice is stronger and more distorting than the pride of intellect. This prejudice has been treated of, with its consequences, in the Second Book.

CHAPTER VIII.

WHAT FAITH IS.—THE SCRIPTURE VIEW OF FAITH.

FAITH is opposed to sight.

“We walk by faith and not by sight.”

“Faith is the substance (ground) of things hoped for; the evidence of (that which makes us trust on) things unseen.”

Faith, therefore, causes us to act as if we were persuaded of things which are not seen, on account of distance:—First, in respect of space; “Go ye into the village over against you, and ye shall find an ass tied:” “The king of Babylon has set his face against Jerusalem this same day.” Secondly, in respect of time, the future: “To thy seed I will give this land.” “When thou hast brought forth the people out of Egypt ye shall serve God upon this mountain.”

3dly. Faith causes us to apprehend things not seen by reason, that is by philosophy: that is, of which the means to the end are not perceivable.—For examples, “Behold I rain bread from Heaven for you:”—“The Lord shall give you in the evening flesh to eat, and in the morning bread to the full.” “The wind bloweth where it listeth and thou hearest the sound thereof, but canst not tell whence it cometh:—so is every one that is born of the Spirit.” Knowing is not believing:—the

devils believe: that is, know. "When I am weak, then am I strong." "The natural man receiveth not the things of the spirit of God, neither can he know them, because they are spiritually discerned."

4thly. It therefore believes improbabilities,—impossibilities:—Peter emboldened to walk, and walking on the sea. "And being not weak in faith he considered not his own body now dead, neither the deadness of Sarah's womb." "By faith Noah, being warned of God of things not seen as yet, prepared an ark."

5thly. It believes miracles, — God's power to do everything: "Accounting that God was able to raise him up even from the dead." "Sun, stand thou still." "The sun shall go back ten degrees."

This is independent of the question of law: namely, how God does it.

It believes special miracles: contrary to law,—or all that appears to be law; or whether it be a higher law, comprehending and providing for pre-ordered exceptive cases. But miracle is the contact of the divine and moral with the physical. The human acts with and overrides the physical. Knowledge, prescience, command, occasion, co-operate and coincide with, and give the character to the phenomenon. The moral, the divine, are pre-eminent over the physical, superseding it; and convince of the presence of God, and constitute the miracle. But this by way of digression.

Faith believes, therefore, in special Providence.

Faith believes in the power of prayer, of importunity.

Faith believes the influence of the Holy Spirit before it is felt; because God has revealed it and pro-

mised it. It prays for and trusts to it in temptation and trouble. It does not pre-meditate a defence.

6. Faith is not speculative, but operative.

“Faith without works is dead.”

“By faith Abraham offered up Isaac.”

By faith David fought Goliath with a sling and stone.

By faith Noah built the ark.

7. Faith works on and through the heart.

“With the heart man believeth.”

“Faith is the (instrument of the) victory that overcometh the world; that is, the world in our hearts.

“The Scripture method of sanctification is as much opposed to nature as the Scripture method of justification” (Adolph Saphir, “Christ and the Scriptures,” 179). That is, it is not effected by human persuasion, operating upon the intellect by reasoning and educational training, but it is by the divine influence of the Spirit which operates on and through the heart.

“Out of the heart proceed evil thoughts,” &c.

It is “the heart” which “is deceitful above all things and desperately wicked.”

The heart is the seat of passions, anger, envy, jealousy, revenge, hatred, fear, malice, avarice, selfishness. The heart also rejoices in the Lord,—loves, sympathises, compassionates, is tender-hearted, charitable, courageous.

Faith therefore operates in and upon the heart in all these.

“The heart is exercised in faith.” (“Ecce Homo,” p. 96).

One of the strongest examples is in David and Goliath. "Is there not a cause?" "Who is this uncircumcised Philistine, that he should defy the armies of God?"

8. The effectual operation of faith.

Faith and the Spirit concur, and reciprocally co-operate. Faith acknowledges, looks for, and recognises the Spirit: the Spirit thus received unites itself with, enlightens, and informs this faith. The man of faith becomes a spiritual man; he has a spiritual discernment. "The natural man receiveth not the things of the Spirit of God;—neither can he know them, because they are spiritually discerned." "Spiritual things are imparted to spiritual men" (Moorhouse): "The Spirit beareth witness with our spirit." So faith furnishes a new sense to the spiritual man; whereby he apprehends things which are unperceivable by the natural sense, and has a knowledge and understanding of things which are foolishness to the mere worldly and natural man.

9. The power of faith.

Faith can remove mountains: *i. e.* overcome things insuperable:—

As Joshua made the sun stand still; Moses led Israel through the sea; fed two millions of them in the wilderness; Elisha raised the dead; Peter walked on the water.

10. Is this power an increase of man's power: exalting his own nature and energies; or is it God's power only which is called forth and moved to work by man's deserving, in answer to prayer and faith? Did the Centurion himself cure his servant by believing? Did the blind man save himself by his faith? Did the

woman with an issue of blood make herself whole? No; it was the divine power which wrought the cures in answer to faith. Jesus says, "As thou hast believed so be it *done* unto thee: and his servant was healed." "Woman, thou art loosed from thine infirmity." "Elias prayed earnestly that it might not rain, and it rained not on the earth three years and six months; and he prayed again, and the heaven gave rain." Moses held up his hands (in prayer) and the Israelites overcame the warlike Amalek; and when his hands were heavy, and were not lifted in prayer, Amalek prevailed. "Whatsoever ye shall ask in prayer, believing, ye shall *receive*." "Whatsoever ye ask, believe that ye have it, and it shall be *done* unto you." Our Lord Himself at Lazarus' grave, said, "I know that Thou hearest me always."

The philosophical theory of witchcraft, necromancy, magic, spiritualism, is that men can gain power in themselves over the spiritual world, and compel it to work under their will and authority: not according to their prayers, but at their command: as arrogated and professed by Prospero:—

"By whose aid,
(Weak ministers though ye be) I have bedimm'd
The noon-tide sun, called forth the mutinous winds,
And 'twixt the green sea and the azur'd vault
Set roaring war; to the dread rattling thunder
Have I given fire, and rifted Jove's stout oak
With his own bolt: the strong based promontory
Have I made shake; and by the spurs pluck'd up
The pine and cedar: graves, at my command,
Have waked their sleepers; oped, and let them forth
By my so potent art."—*Tempest*, Act V. Sc. II.

This is the theory of heathen demonology and German spiritualism.

11. Now the basis and preparation for faith is humbleness of mind. "Behold, his soul which is lifted up is not upright in him; but the just shall live by his faith."* "How can ye believe which receive honour one of another?"

12. But I am not proposing at this time faith in Christ as my subject. That is distinct; as it is from all the examples given by St. Paul in the 11th Chapter of the Hebrews. I am only setting forth the Logical view of it proposed in the Scriptures, as St. Paul there does. Faith in Christ is another thing; the special end and object,—the culminating application of the principle.†

13. The Logical end of all is,—that we must have a spiritual sense, apprehension and discernment,—as opposed to, but rather in aid of human understanding and comprehension: 1 Cor. chap. i. and ii. We must have the powers, and the experiences, and knowledge furnished us by this faculty. Without this the mental powers are not complete. But these are necessary to make up the whole intelligent man; his full complement of faculties, capacities, and powers, fully exercised in, and fully furnished with, all those intelligences, objects, materials, and motives, which can alone fit and enable him for the examination, appreciation, and fulfilment of the best and highest, and, therefore, the alone real objects of his existence and reasoning.

* The Vulgate and Douay have, "Behold he that is unbelieving his soul shall not be right in himself. But the just shall live in his faith." But then it goes on, "And as wine deceiveth him that drinketh it, so shall the proud man be." So the effect of the passage is the same.

† For it see Adolph Saphir: "Christ and the Scriptures," p. 177—184.

CHAPTER IX.

FAITH AND REASON.

FAITH and reason, though distinct, are not opposed. Right reason leads up to faith, and supports and co-operates with it. Faith is no more opposed to reason than spiritual life is to intellectual life; intellectual life to animal life; animal to vegetable life; vegetable life to chemical action; chemistry to the laws of physical motion,—gravitation, magnetic attraction, cohesion. The moral is different from the intellectual life; the animal from the vegetable; the chemical from magnetic attraction, and gravitation; but all these co-exist and co-operate: the higher always aided by and controlling the lower, and as it were superseding it. Nay, it is now conjectured that all these merge one into the another, and have a common origin and principle. Yet they are different and distinct. And so different that the distinct operations of more than one of them may be seen in use at one and the same time.

What then is faith? Is faith in religion *sui generis*; and so different in its nature that it cannot be compared with, or illustrated by, anything we find in our experience? Must it be taken to be and dealt with

as opposed to and contradicting reason, and incompatible with it; so that one or the other must be chosen, and admitted to rule and act exclusively and opposingly?

Religious faith cannot act without reason. It is founded upon and supported by it. Faith is one of the highest exercises of reason: it is reason exercised upon and applied to the highest objects and interests,—to our interests and duties as connected with the spiritual world, and the divine disposer of it, and the material world; and our interests not for time only,—for fifty years or seventy years, but for eternity. As “the spirits of the prophets” (that is, supernatural influences), “are subject to the prophets” (that is, to human and rational agency and control), so faith, its working and use, is subject to reason, in its admission, and application.

Faith is the most natural and necessary faculty and operation in the human mind and life.* Like everything else it differs infinitely in degree; and in degree and application it is that it takes its quality, its virtue: its name and meritoriousness. Faith is used and required in all that we do, in every choice, resolve, and action of our lives, from the cradle to the grave.

We have a natural and necessary disposition to believe what we are told. This seems to be independent of our experience that people generally tell the truth, and of the necessity we are under of depending upon

* “That original principle of the human mind, which disposes us naturally to believe, and give credit to the testimony of others; which may be called the *principle of faith*, or *credence*.” —Note of E. W. Grinfield, editor of Tatham’s Bampton Lecture. Vol. II. p. 325. Edit. 1840.

the information of others. For when we are told anything positively, and when men speak confidently, we more believe them; but if they speak hesitatingly we are less persuaded, because we adopt the degree of assurance which seems to be in the mind of the speaker. The natural disposition is to believe. Doubt is not the first impulse. But experience it is which raises, and first suggests, doubt; belief is the natural desire of the mind. And this is fostered, confirmed and strengthened by the necessity of our lives, and our dependence on others, and by the experiences of our existence: according to which we find that the first informants and instructors about us are directed by love and desire for our good, namely our parents and nurses. And this experience is continually confirmed and strengthened, so that we look up to our parents as oracles of truth and wisdom, and rely upon them implicitly,—till in riper years, of our own independent thought and investigation, and experience of fallibility in parents, and absence of love and disinterestedness in other persons, we begin at length to doubt and to disbelieve: doubt and disbelief being adventitious, and not the first and natural act and disposition of our minds.

And this is one of the greatest and highest and most fundamental analogies of our existence, the relation which we have to our parents, as a type of the relation we have to God, our greatest, most loving, and eternal parent. If our earthly parents have love to us, and in exercise of their love do us every good, and provide us with everything that is true and useful in knowledge and nutriment, according to their own best goodwill, and affection, and wisdom, though fallible, and we

trust in them accordingly, so we are by this trained into the belief that our heavenly Father will and does provide and furnish us with all that is good and right in precept and revelation; and this in proportion as we are persuaded that He is not less than perfect in love, and infinite in knowledge.

Now this faith, in human things, is called trust. But this word only characterises the application and the degree. It is the same thing in faculty and nature. It is, like the other, cognisable of things out of our sight: out of our knowledge, and possibility of knowledge. The child knows nothing of the food which he eats,—of the use of the lessons which are given him to learn,—of the reasonableness of the rules of conduct prescribed to him. The grown man trusts that the bread which he eats is wheaten, that his sugar is Jamaica and not beet, that his wine is imported from beyond the seas, that his medicine is what he sent for, and the chemist says it is,—and stakes his health and life upon it. Of all these things he has not the time nor means for investigation. He trusts his fortune to his banker, or the funds, or the directors of a company. He has a partial experience and judgment, but he has a real knowledge of none of these things. Confidence and trust are the foundation of all, and of his action in each of them. What implicit trust we have in our doctor, where we know nothing of his art; what confidence in our lawyer, who brings us a deed to sign which disposes of thousands; and when we entrust him to receive for us or invest faithfully what amounts almost to a fortune. What confidence and security we feel in the machinery of government, the protection of the law, the routine action and consenta-

neous movement of the multiform members of the social system ; so that we go about and plan and execute our business and schemes with as much certainty as if we saw and understood all the infinite parts and agencies of the stupendous machine, and were ourselves directors of the millions of minds and wills that set this machine going and keep it in consentaneous working,—though we know scarcely any one thing in any department, and can direct or influence no dozen wills in any part of it. Yet the stoppage of any one wheel, or the failure of any one link, might deeply affect all our interests and designs, and even our lives.

What innumerable and unknown interests and agents supply concurrently and exactly the thousands of cattle, and sheep, and fish, and other food that come up weekly and daily from all parts to supply the London demand of three million people. Yet if these were to fail, these millions must be as much without their meal as the gentleman who came home one day and found himself without dinner, because he was ruined.

When it was seen, as shown above in chapter iii. of Bk. IV., and Bk. II. ch. i., how little we know, and can know, is it not plain that we do and must live, and move, and act on trust in almost every moment of our lives? We are informed of things we cannot know for ourselves by astronomers, by anatomists, physicians, chemists, geologists, travellers, historians, newspapers. We act on trust in all these. Yet our belief in these men is founded on reason, on sober sense and experience. If we did not believe in their revelations, we should be thought fools and idiots. Eclipses do take place according to their predictions ; hundreds of thousands

of ships do steer their course safely by the tables of the moon and planets calculated by them. We commit our limbs and vital parts to surgeons to amputate and approach with the knife, and we come safe and saved from their hands. Physicians do cure us. The conclusions take place which are consequent upon the news which we read, and confidently act upon. All our actions and lives are directed and constrained by belief. And yet our designs and expectations are exactly fulfilled, and reason, sense, and experience, justify our confidence. Are not ninety-nine hundredths therefore of our acts and expectations founded upon faith; and is not faith most useful, necessary, and universal; and is it not justified and supported by, and co-operative with reason?

Dependence and trust on others, in human and earthly things, is called belief and confidence; in un-earthly things it is called faith.

If it is founded on reason in all earthly things, how need it be less founded on reason in heavenly things? It must be more necessary in heavenly things,—if there are any such,—for these are more beyond our knowledge and apprehension than earthly things. The only question is, is there any other world, and are there any other things than those which are cognisable by human experience and sense? If reason then shows us that as there are invisible and unintelligible agents on earth,—the air, heat, electricity, magnetism, gravitation, chemical attraction, nerval and vital action,—so there must be one or more invisible and intelligent powers constructing, governing, disposing this material and mental universe; surely the belief and trust in this Being, or these beings, is warranted, supported, and

dictated and constrained by reason, as concurrent and compatible with it. And these two may and must act together, and be in harmony: Reason leading up to and defining the province, occasion, and degree of Faith, according to the subject, necessity, and pretension; and resigning and withdrawing its claim and empire where it sees and knows experimentally and rationally that it cannot reach.*

As belief may be undistinguishing and credulous, so faith may be unreasoning and superstitious.

Reason leads up through natural theology to God. Natural theology is reason. Reason therefore leads up to knowledge of a God or gods; of a being who knows those things which we cannot know, and can work those things which we cannot work or comprehend; to a being, therefore, who can reveal to us things we never can become acquainted with except by a revelation: things which we must receive, if at all, by faith. And faith is religion;—and religion is faith. Reason, therefore, is the support of religion,†—as illustrated by Paley.

All religions profess revelation from God to man.

Reason distinguishes between religions, and chooses by the understanding and judgment which is the best.

* Reason rightly used teaches the existence of truths which are above reason. Mansel, "Bamp. Lect." II. p. 36.

"That miracles are impossible is repudiated by the more philosophical among the leaders of rationalism itself." Ib. p. 194.

"Kant distinctly allows that there is no sufficient reason for denying their possibility as facts, or their utility at certain periods of the history of religion." Ib. Lect. V. note. 31.

† "Let religion begin where it will, it must begin with that which is above reason." Ib. p. 182.

Reason collecting, comparing, and weighing all the analogies of man's nature and the universe, accepts religion and revelation according to its estimate and approval of them. It accepts the revelation of immortality as consonant to his nature and the aspirations of it, and the analogies furnished by operations of the animal, and vegetable, and material creation. And it accepts that view of immortality which is consonant to his most enlightened conceptions and aspirations. It justifies by its highest wisdom and light, illustrated and illumined by all the analogies of human nature and social life, the scheme of redemption and regeneration which is proposed by this religion or that: as illustrated by Butler, Bishop Browne, Buchanan, &c. It approves and appropriates the special doctrines of a revelation, according to its Logical collection of the like analogies: as illustrated by Buchanan. It arrives at and rests and rejoices in an implicit faith in that revelation whose appreciable doctrines it reasoningly approves; and hence it submissively, and confidingly, and reverently accepts all the doctrines, dogmas, and precepts of the same divine revelation and the inscrutable author of it which it cannot comprehend, confirm, or understand, as a little child from its parent.

Thus reason leads up to, supports, upholds, justifies, and co-operates with faith.

Let us examine one example of applied faith and reason,—for instance, in the incarnation. An incarnation is incomprehensible and impossible. It is, however, no more incomprehensible than the union of soul and body in the birth, and entrance into being of one new, self-conscious individual, immortal man. The creation and

being of the one and the other is alike inexplicable and incomprehensible. The incarnation is impossible. It is impossible in two senses. It is impossible that divine and mortal nature should be united. But faith in the omnipotence of God the Creator having been established by reason, that impossibility is overcome. It is impossible, also, because there is no example or precedent, and no analogy to support such an event, which contradicts all experiences. But then the physical impossibility having been overcome, as above pointed out, there are certain aids to overcome the other impossibility: which is, in fact, only the highest possible degree of improbability,—viz., that God, though He could, would violate the unexceptional uniformity and inviolability of His own law. First, there is the greatness, the exceptionableness and sufficiency of the occasion,—an exceptionableness equal to the exceptionability of the act itself. Next, in the absence of examples and direct analogies, God has provided artificial, typical analogies, in His preparatory disposings and record, coming as near as possible to the miracle without actually exemplifying it, in the birth of Isaac from aged and effete parents; in the birth of Samson, and of Samuel, and of Maher-Shalal-Hash-baz. Thirdly, in these births having been all prophesied of: so that a miraculous and divine character was thereby given to each of them. Fourthly, the idea and expectation of an incarnation was deeply imprinted in the thoughts of mankind: as exhibited especially in the Hindoo mythology; and not less abounding in, and forming the substance of, the mythology of the Greeks, in their heroes and demigods; and constantly and significantly budding and bursting forth in most of the other religions of the world.

These are some of the co-operations and supports which reason gives to faith in the doctrine of the incarnation, which is here selected and put forward by way of example.

The warrant and support which reason gives to faith has here been shown chiefly from the analogy of trust and confidence in our fellow-men, and its practical use and necessity in all human affairs: this necessity arising from the very little we know, and can know, of the facts and truths upon which our acts, and designs, and resolves, upon which our lives depend; and from this necessity becoming greater in proportion as the spiritual, the eternal world, the creating and governing principle or principles of the moving and living creation, rise infinitely higher above our apprehension and experience.

Let us now speak a little, further, of the *philosophical* necessity arising out of our incapacity of comprehending or apprehending the immaterial, the invisible, the spiritual, the heavenly world.

Mansel, in his "Bampton Lectures," has proved demonstrably that man cannot comprehend God; that the finite cannot comprehend or conceive the infinite; that all comprehension and exercise of faculties is a limited act, is exercised on something limited and definite; that the abstract infinite,—the simple existence, τὸ ὄν,—the ultimate abstraction of philosophical theology,—without body, parts, passions, as in our article,—is a thing inconceivable,—a nothing to the mind. That eternity of time,—i. e. time without time,—that infinite space,—i. e. space without space and limit, are equally inconceivable. Other inconceivable truths, yet truths, are such as these: "In God there is a present in which there

is neither past nor future" (St. Augustine): "Eternity is the possession of interminable life, and all that life at once" (Boethius, so Aquinas). This is equally and more obviously the case in powers and perfections, potential, and moral,—omnipotence, omniscience, all-good, all-love, all-merciful, all-just, all-compassion: all these can only be conceived as existing in acts; and all acts have application and limitation. All these, as distinguished from one another, are parts; and parts cannot be infinite; neither can the infinite be made up of parts. All assignment or conception of attributes, therefore, are limitations, and incompatible with the infinite. Truth, justice, mercy, wisdom, cannot be conceived of as infinite in the abstract, without exhibiting themselves in some being. And act and being are limitations, and cannot be the infinite, the $\tau\acute{o}\ \acute{o}\nu$.

Such a God, being such as we never could conceive, could, in consequence, never be revealed to us. Even the "I am," of the wilderness and the bush, $\acute{o}\ \acute{\omega}\nu$, is a different idea from the neutral $\tau\acute{o}\ \acute{o}\nu$. The "I am" is revealed as a person; the other is an abstract thing, a no-thing. God is revealed to us in the Scriptures as a person; and a person is limited, finite. Therefore God is revealed, and only revealed in an incarnation; though we know and are instructed that there is something beyond, unrevealed, incomprehensible. "No man hath seen God at any time." The attributes of God: His love, His mercy, His justice, truth, wisdom,—even His power, which is the exercise of all these, could only be revealed to us and exhibited in the incarnation.

Two things, therefore, are corollaries from this incapability of man: First, that as thought and experience

cannot be the measure of existence,* and there are things above and beyond man's understanding and investigation,—therefore there are of necessity subjects for revelation and faith.† Secondly, that these can only be revealed and comprehended analogically, according to the capacities and experiences of human nature and human life.‡ And in moral and religious truths, this analogy is the incarnation.

The infinite being incomprehensible, and the infinite and the finite being incompatible, the union of the infinite with the finite is still more incomprehensible and impossible. Yet the Incarnate Son of God,—at the same time Son of Man,—unites these two contradictions: being of all things the most incomprehensible and impossible. And this is the continual paradox of all our Saviour's language and doctrine. And yet the theologians have endeavoured to understand and explain it.

* For "thought can only be of the limitable (limited): yet we must think of and confess God to be illimitable,—*i. e.* beyond thought." Mans. "Bamp." Lect. III. p. 72.

† "We know that unless we admit the existence of the infinite, the existence of the finite is inexplicable and self-contradictory. And yet we know that the conception of the infinite itself appears to involve contradictions no less inexplicable. In this impotence of reason, we are compelled to take refuge in faith, and to believe that an Infinite Being exists, though we know not how."—Ib. Lect. IV. p. 120.

‡ Wegscheider admits (Instit. Theol. § 52) that the infinite cannot be comprehended by the finite, and that its idea can only be represented by analogy and symbol. (Ib. Lect. 4. note 1.) Moreover, "The knowledge that doctrines are accommodated to the capacity of man (*i. e.* analogically) does not explain the difficulties, but shows the necessity of mysteries" (*i. e.* subjects of faith).—Ib. p. 259.

I have said that every faculty of a man ought to be exercised in performing the highest function of man, which is reasoning:—apprehension, judgment, memory, imagination, order, arrangement, classification, generalisation, comparison, distinction, and many others,—for it is impossible to enumerate all the reasoning faculties of the mind, or to define and distinguish them accurately; for one faculty blends into another, and each person names and uses them somewhat differently from another. Judgment is one of these; yet all these go together to make up the judgment, which is but the ultimate operation of reasoning. Nearly all these go to make up the apprehension, according to the subject of it,—which in a manner, and in certain subjects, is the highest operation and end, and the exercise of judgment itself.

Apprehension and judgment have been treated of in the First Book. Much has been said also, in the Third Book, of the use of imagination; which is the essential instrument in analogy, allegory, parable, type, metaphor, simile, example,—of which so much has been said and enforced as being the main ground-work of moral and religious reasoning. It would be useless to define and describe the uses of all the rest. This exhaustive method savours of and satisfies scientific parade; occupying much space and time, and leading to little corresponding usefulness. And this has often been done in other treatises. Practically the application and use of these several powers are known; and practice and use are wisdom. There are special faculties in use in the highest provinces of reasoning; and these have not been so well recognised and so much treated of. It will

be more useful to bring into notice and vindicate the office of some of these. Complete enumeration is not to be accomplished or expressed in a treatise which only professes and hopes to introduce a new art and method, which, if well founded and warranted, must be cultivated and pursued to better use and more effectual application.

With all its seeming pretension and digestion, the author is well aware that this treatise ought only to be considered to be suggestive and initiative.

It is confidently hoped that it will be carried on hereafter by earnest and faithful workers to much greater completeness. This can never be till its general and fundamental principles are well accepted and approved. Then those chapters which treat of Aristotle and his false system, and of syllogism, and much that has been said about mathematics, may be omitted, as being upon matters out of date, and upon which no argument, or refutation, or caution, is any longer needed; and then more elaborate and complete enumeration and application may be given without offence or tediousness of those faculties and processes which are operative and efficient in the highest branches, and efforts and aspirations of reasoning.

Faith is one of these higher faculties or instincts, which are in use in moral and religious reasoning. And this has been treated of in the two last chapters.

Another high and important instinct which must be recognised is THE RELIGIOUS FACULTY.

CHAPTER X.

THE RELIGIOUS FACULTY.

RELIGIOUS intelligence,—the religious faculty,—is distinct from philosophic intelligence,—the intellectual faculty. They are even opposed to one another. Accordingly, St. Paul says, “The natural man receiveth not the things of the Spirit of God, for they are foolishness to him; neither *can* he know them, because they are spiritually discerned.”

The instinct of religion is universal in all nations and races; with scarcely so much difference as there is in other faculties. Even savage and uncivilised nations seem to be most prone to it; and the most disposed to make religion an ostensible part of their daily and hourly habits and impulses. The early histories of the world, too, and nations, show more of the uses and appliances of religion in all the business of politics and social life. It may have been what we call superstitions. But we are noticing now the existence of the religious element; not the truth and exactness of the application of it. However, the correction of superstition, or heterodoxy, or heathenism, is not affected by philosophic and scientific training and discernment,—but, as St. Paul says, the cross of Christ, the faith and humiliation which it imports, is still to the Greeks

foolishness. But the religious faculty is trained to the true Christianity, not by science or syllogism, but by the schooling of the heart, and conscience, and life, and submission of the will and mind and spirit.

The religious faculty then is universal; and it is independent of intellectual powers and progress and pre-eminence, in races and nations. It is also seen to be independent and distinct in individuals. Idiots have exhibited capacity for the religious faculty, when all the intellectual faculties have been weak. A known idiot, who had never been supposed capable of religious impression, presented himself at the communion rails to receive the Lord's Supper; but the clergyman repelled and dissuaded him, telling him that he was unable to understand the rite. To which he replied, "To whom much is given, of him shall much be required." Upon this he was allowed to communicate. And the next day he died.

Another idiot, called Will Walker, or, Will the Walker,—from his being always walking about, went to his clergyman, the Rev. Enoch James, of Llandissul, Cardiganshire, and told him that he wished to come to the Communion. His pastor reasoned with him, and dissuaded him; and to put him off offered him a sixpence; on which he said, "Is sixpence the worth of Will's soul?" Upon this Mr. James admitted him to the Communion.

Owen Pembry, an idiot, used to go to every religious service within reach; even eight or ten miles off.

The tract "Poor Joseph" relates the history of an idiot who strayed into the church of Dr. Calamy, and heard him preach upon the text, "Jesus Christ is all

in all." The idiot ever afterwards sung to himself, and used upon his death-bed, the rhyme,

" I'm a poor sinner and nothing at all ;
But Jesus is my all in all."

The following instance is illustrative of the same point. "An illiterate female in humble life applied to Dr. Davidson, of Edinburgh, for admission to the communion; but, upon examination, she could not frame one articulate reply to a single question that was put to her. It was in vain to ask her of the offices or mediation of Christ, or of the purposes of His death. Not one word could be drawn from her; and yet there was an air of intelligent seriousness, the manifestations of right and appropriate feeling, a heart and a tenderness indicated, not by one syllable of utterance, but by the natural signs of emotion which fitly responded to the topics of the clergyman, whether she was spoken to of the sin that condemned her, or the Saviour that atoned for her. Still as she could make no distinct reply to any of his questions, he refused to enrol her as a communicant; when she, on retiring, called out in the fullness of her heart, 'I cannot speak for Him, but I could die for Him.' The minister, overpowered, handed to her a sacramental token."*

Strong and deep religious impressions are found existing in the deaf and dumb.

The chaplain of Lewes Gaol informed me, that among his prisoners, the rude, uninstructed country-

* Conclusion of Dr. Chalmers' speech before the General Assembly, 1839, after the decision in the Auchterarder case. (Quoted from "Sydow, on the Scottish Church Question," p. 50).

men proved more capable of religious impressions and improvement than the educated artisans from the towns.

The common people heard Jesus gladly. Not so the Scribes and Pharisees.

"The poor in this world, rich in faith," says St. James.

Little children very frequently attain to and die in the highest Christian state and experience. So the author of the "Christian Year" writes of them :

" Oh, say not, dream not, heavenly notes
To childish ears are vain :
That the young mind at random floats
And cannot reach the strain.
Dim or unheard the words may fall,
But yet the heaven-taught mind
May hear the sacred air, and all
The harmony unwind."—*Christian Year. Catechism.*

Examples may be seen in Janeway's "Token for Children." "Abner and David Brown" is a record of religious precociousness in children. A like account of Evelyn's child is to be found in his Memoirs. Other instances will be familiar to almost every person of religious inquiry and experience.

A child two and a half years old, at Abergavenny, when just dying, looked up and said, "Pretty house," "Open gate," "Go to them." (Rev. J. F., Sept. 1868.)

How extremely fond children are of fairies, fairy tales, tales of genii, and appreciative of the supernatural. This seems to be closely connected or allied with the religious instinct. Reason dulls, discredits, or extinguishes this taste : as it does all instincts.

Isaac Taylor is recognising the operation of this faculty when he speaks of man's "consciousness towards God:" of "the life of the soul towards God." It is the instinctive apprehension of a divine power above us, around us, within us: unseen, but seeing us; watching over, approving or disapproving our acts; able and powerful to dispose the course of nature and events,—to reward and punish. The recognition of this Being as powerful and self-willed produces superstitious dread; the apprehension of Him as good produces reverence,—and if offended, conscience.

Ruskin recognises and describes this religious apprehension in the following passage: "The tact or touch-faculty of body and soul: that fineness and fullness of sensation, beyond reason,—the guide and sanctifier of reason itself." "Reasoning can but determine what is true. It is the God-given passion of humanity which alone can recognise what God has made good." (Ruskin's "Sesame and Lilies," p. 61.)

Mr. Parker says, "There is a connection between God and the soul, as between light and the eye, sound and the ear, food and the palate," &c. (Mans. Bamp. Lect. II. note 2.)

Mansel himself says, "Religious consciousness is first: round which experiences and arguments cluster." (Ib. Lect. IV. p. 103.)

Max Müller says, this *sensus numinis* is faith (2nd vol. p. 266). And it acts with, and is closely allied to faith; and one cannot exist without the other. With faith, too, it may be cultivated and increased: it may be quenched also and almost extinguished. Like faith, in its highest and truly efficient state it is given in

answer to prayer ; and prayer, having God for its object, is itself an exercise promotive and creative of it. It is naturally more active and stronger in one person than another. The Chinese, as a nation, have less of it than other people. Disuse and denial of the efficacy of prayer, physical philosophy, and exclusive worldly pursuits, deaden, and stifle, and forcibly expel it. The last effect of such practised neglect and studied exclusion is a judicial insensibility and blindness.

CHAPTER XI.

THE MORAL FACULTY.

As there is a religious faculty, so there is still more plainly a moral faculty, or moral sense. The exercise and use of this is the distinction of good and evil ; and not only the recognition that the one is different from the other, but further, the approbation of the one and the disapprobation of the other : that is, apprehension that the good is good, and the evil is evil : the one desirable, the other to be repressed ; that is again, in effect, that the one is deserving of reward, the other of punishment. The result of this in purely human relations is self-conviction and shame ; elevated and applied in a religious sense, and to our relation to an unseen witness of our actions, it produces conscience.

It may seem that all this is too complicated and consequential to show a natural sense ; that these must be only the adventitious productions of experience and reasoning. But the same might be said of all our other senses. It is not till objects are presented to the eye, or sounds to the ear, that the senses are recognised and exercised into existence and power ; yet the exercise did not create them. There is the ability and aptitude for sensation and apprehension in every sense before it receives an impression, and is exercised into discern-

ment; and if there were not that sense no impression or distinction could be made, any more than sounds can affect the eye, or light and colours those who are born blind, or we can hear and understand the communications of insects; but moral phenomena and the internal senses are mutually made for, and adapted to one another, in the same way and degree in which the bodily senses and the objects and operations of external nature are correlative, and prepared, and fitted, one for another.

There is a moral sense then, which is an instinct of our common nature: which is the first principle and foundation of all morality; and without which mankind would not have the essential element and cement which unites them into a society: that is, into a college of reasonable and responsible beings, having relations and mutual obligations one to another.

Philosophers have generally admitted the existence of this sense.

Kant said, "Two things amaze me,—the infinite space thick sown with stars, and 'the sense of right and wrong.' "*

Dr. Tatham thus writes, in his not very lucid and accurate style, but laying hold of the truth: "That native and original evidence, which is the first principle of all morality, forms an instinct of our common nature, implanted in the human breast by the hand which formed it, interwoven in the very stamina of our constitution, and given, as all instincts are, to direct us to our good. This is another first and universal inlet

* From Moorhouse's 3rd Sermon, published with his "Hulsean Lecture," p. 201.

of knowledge to the mind; and some philosophers have very properly given it the name of internal or moral sense, in contradistinction to external sense, the other great and universal inlet of natural light: which different evidences or first principles of knowledge, in their several operations upon things, form, indeed, the clearest and most philosophical distinction between theoretical and practical truth. This evidence of internal sense is the dictate of conscience which reigns predominant in the human breast, as a remaining spark of its native light, and as an indelible witness of that consummate purity and perfection in which it was originally designed. This moral principle of conscience has, by some philosophers, been justly represented as "God within us."*

In this he does not distinguish between the moral and religious faculty; and of course they co-operate and blend together in the religious man.

In this he follows and paraphrases Bacon's language,—"Notandum tamen, lumen naturæ duplici significatione accipi. Primo, quatenus oritur ex sensu, inductione, ratione, argumentis, secundum leges cœli et terræ: secundo, quatenus animæ humanæ interno affulget instinctu, secundum legem conscientiæ, quæ scintilla quædam est, et tanquam reliquiæ, pristinæ et primitivæ puritatis. In quo posteriore sensu præcipue particeps est anima lucis nonnullæ, ad perfectionem intuendam et discernendam legis moralis."†

This faculty is instinctive and everywhere exists,

* "Chart and Scale of Truth," vol. I. p. 228.

† "De Augm. Scient." lib. IX. c. 1.

even among those who most habitually violate it. For, like other senses, it may be deadened by disuse, or quickened by exercise and habit; and in the most immoral, criminal, and degraded societies, there is always a sense, a rule of right and wrong, a conventional code of obligation and morality. For though innate in all, it exhibits itself in every kind of form and degree, not only in individuals, but more discernibly in societies and nations. Every nation has its own code of morality, as it has of religion. So in some lying and stealing are not breaches of right and duty, but a breach of hospitality would be deserving of execration. Self-sacrifice for a compatriot and neighbour may be a peremptory obligation; but to let a Samaritan die or starve may be in the same society esteemed virtuous. A proper pride, a proper vanity, a proper love of money, and love of rank, a proper hatred of one's low-bred neighbour, are approved and honoured propensities; but in all the sense of right and wrong, of good and evil, is operative, and the moral apprehension enters and is active.

CHAPTER XII.

SENSE OF TRUTH.

THE sense of Truth is another faculty. It is not the mere distinguishing of what is true and what is not true,—a fact stated from the real fact. The sense of truth is a moral, not merely a scientific faculty. It is the approval of what is truly stated, and of the person who states it, and the disapproval and condemnation of one who asserts a thing falsely.

It may seem to be merely the application of the moral sense to matters of fact and statements; and to be not at all distinguishable and additional to the moral sense of right and wrong in conduct. Like all operations of the mind they unite and blend together in act and in the character. The characters and genius of men are infinitely combined and varied. But practically we distinguish them,—whether all faculties of the mind are one faculty infinitely varied, and all passions and affections are one effort of the heart infinitely multiplied in its motions, and objects, and applications. And it is use and application which is the end, and makes the reality and distinction in morals and religion, and policy and purpose, in this life and the next.

There is then practically and in use a moral sense of truth, which not only looks for and distinguishes, but approves it.

This faculty extends its application into a higher region than fact. It rises to the region of truth in opinion and doctrine. It elevates itself into, and revels, and delights, in the sphere of philosophical, intellectual, into moral, doctrinal, speculative, and revealed truth. It becomes one of the most active and influential faculties and agents in all life, human and divine, material, moral, and religious; it stretches from earth to sky: from the lowest depth to the highest heaven; and the worker for his living and existence, the worldling, the patriot and politician, the philosopher, the moralist, the theologian, the divine, all unite with consent in the one inquiry and aspiration,—What is Truth?

CHAPTER XIII.

THE SENSE OF MODESTY.

OF the more refined of our internal senses, which cannot all be recounted and enumerated, one which may be taken for an example is Modesty. This is one of the most refined and finest of the senses and sensibilities of our nature: so fine, that it may be noticed as being peculiarly the female sense,—though not, in effect, confined exclusively to that sex. It may best be treated, however, by being considered in its relation to females alone, because its operation and use are more seen in them.

Modesty,—the effect of which is shame,—but that is too coarse and comprehensive a word properly to be used to designate its effect; modesty then is an apprehension or sense which instinctively and instantaneously awakes to consciousness of impropriety, a sensitiveness which gives warning and reprimand, to the one sex in the presence of the other. Its sensitiveness, refinement, and delicacy, are hardly known in their instinctive originality in our northern climate, and in the freedom of manners and habit which is the law of our society. An example and exhibition of it in its natural and instinctive sensitiveness, is related in “Notices of Do-

mestic Life in Palestine.” An English physician was called in to prescribe for the daughter of a Turkish Cadi, fourteen years old. When he proceeded to feel her pulse she was suffused with blushes and overwhelmed with confusion, having never before seen a man in her room, much less touching her wrist.

Philosophy cannot enter into and appreciate this sensibility. It is infinitely too nice and subtle for its investigation. Accordingly philosophy always tends to the undervaluing of female virtue and delicacy. The more the subject of the sexes is investigated and philosophised upon, the less the value and respect in which female purity is estimated. As science and civilisation advance, the more and more the laws are relaxed which protect it; and still more the general opinion, and prudery, and exactness of requirement, which are the greatest safeguard of all of female character. Till, in its ultimate reasonings, philosophy proposes community of wives. Reason is too coarse and dull for the perception and appreciation of so nice a sense. Philosophy cannot blush.

The habits of fashionable life are tending more and more to freedom of manners and intercourse. “I have in view,” says Mr. Ryle, “the wide-spread decay of delicacy and nice feeling among women of all classes. There is a hideous familiarity with that which is ‘fast’ and indelicate.” *

It is of the highest use, therefore, and necessity to recall to recognition and estimation this precious and protective faculty and sensibility; so active and neces-

* “Are we not in Perilous Times?” By the Rev. J. C. Ryle.

sary in one of the most important departments of moral conduct, and, therefore, of moral reasoning.

The above few examples have been selected, as instancing, among innumerable others, how all the faculties, how the whole mind of man, the whole man, ought to be, and must be, employed in that highest use and operation of man,—in moral and religious reasoning.

CHAPTER XIV.

THE ANALOGICAL FACULTY.

THOUGH this enumeration of the reasoning faculties applicable to moral and religious truth, does not endeavour to be perfect, yet it would seem to be a great omission not to mention the faculty of Analogy. So much has been said about Analogy,—which is here recommended as the great instrument in moral and religious reasoning, that anything more than a mention of it might seem to be only repetition. No one wants to be assured of its existence. It is in a manner the whole faculty of moral reasoning: of reasoning in probabilities; in things not directly known. If analysed it is found to contain within it the faculties of comparison, distinction, proportion, invention, and many others. In itself it is the power which deals with similes, metaphors, types, symbols, and all those branches and topics which have been treated in the Third Chapter of the Third Book.

CHAPTER XV.

DIFFERENT LOGICAL STAND-POINTS.

TRUTH, in the astronomer's view, is the exact quantum of the moon's motion and attraction ; in the geologist's it is the estimate of the periods and causes of the several deposits, and positions, and successions of strata ; in the chemist's it is the exact equivalents, and compounds, and elements ; in medicine it is the diagnosis of disease and application of remedies ; to the politician it is the estimate of opinion and measures ; to the lawyer it is the weighing of evidence, and application of the law to the facts ; to the moralist it is rectitude of conduct ; to the religionist it is the right apprehension of God's revelation.

And since reasoning and judgment are habits, each one acquires a method of thinking peculiar to his study and profession, and seeks to use it in all subjects ; for one cannot acquire an equally ready proficiency in several.

“So vast is art : so narrow human wit.”—And the adaptation of one method to a subject requiring another method, is false and metaphysical.

The statesman must, to carry on the affairs of state,

modify his measures to practicability, and yield a little to this supporter, and that, till counting the votes—understanding the House—becomes a chief talent and tact. Even the bishop has his court about him which he consults, and upon whom he depends for action and support,—to whose opinions he must defer; and he hampers himself with rules, to give uniformity and promptitude to his acts; while the patriot and the zealot are shocked to see such timidity and tergiversation, and to see such toleration of error or misconduct, and a commission in God's militant church refused by rule to such and such a faithful soldier of Christ.

In religion a wrong act is a sin; in morals it is a fault; in the world of honour it is a disgrace.

School honour requires truth in words: one boy says truly, "I did not take it," another, "I have not got it;" aristocratic honour is not jealous of female virtue, but is most jealous of its word of promise. A nobleman having promised an acorn, but having none like it on his own trees, sent to Norway for one; but the real meaning of the undertaking was that he would give one off his own tree if it bore one. Philosophical ethics condemns a falsehood under any circumstances; God's ethics says, "Thou shalt not bear false witness against thy neighbour:" that is, to harm any one. The philosopher, therefore, cannot acquit David of a deception when it was to save his own life, and his enemy from murder. He calls it doing evil that good may come.

English politics are said to be practical: certain fundamental facts and conditions must be assumed; and he that attempts to question or alter them is hooted at

for a visionary. The French, on the other hand, are theoretical; their speeches contemplate fundamental changes. They can look revolution in the face; and addresses on ordinary topics will constantly go back to first principles.

The mathematician necessarily regards everything, and every kind of illustration, and reasoning, and truth, from a mathematical point of view. He conceives of infinity as of one divided by nought ($\frac{1}{0}$). And as $\frac{2}{0}$ is twice as infinite as $\frac{1}{0}$, and $\frac{1000}{0}$ a thousand times as great, so he can easily conceive a difference of degree between the Father and the Second Person, though both may be infinite to us. Again, he can illustrate the action of free-will and grace by the analogy of ultimate ratios. Addison compared man and divine nature to the hyperbole and asymptote: which may be always approaching one another yet can never meet. But these are none of them religious ideas. They may amuse and satisfy, as seeming analogies and illustrations, but they are not taken from the proper stand-point of religious truth.

Each nation, as each individual, views every subject of human life from the stand-point of the national character. This is illustrated in languages. For the thorough linguist in using each language which he speaks,—even when using them to different persons in the same society or conversation,—adopts a certain modification of his ideas and method of thinking, which is the mode of thought which is habitual in each particular nation.

The German spiritualist's idea of supernatural agency is that of man himself controlling and constraining the spiritual world, to being his instrument,

by magical arts; that of the true religionist is the obtaining God's aid and agency by prayer and faith.

Now one line of thought, and study, and principle of interpretation, disqualifies for and excludes another. Such creatures are we of habit,—and our powers are so weak; and they are so limited in number and application, by the necessity of engrossing exercise to perfect mind as well as body in any particular skill and faculty. Much learning has been expended upon the practice on which the expression “sealed” is founded in John, vi. 27: as, that in Egypt the victim, after being examined and pronounced to be without blemish, was sealed by the priest. This leads us astray from the only essential import of the metaphor, from wheresoever taken, viz. the entire approval and adoption of the Son by the Father. In the same way the labouring after etymologies,—which can never govern the habitual use of words, often diverts attention from the nice and exact sense. The Greek word “Hypostasis” may be analysed for ever without getting thereby any nearer to its exact meaning,—which is a mere question of use. It is the same as “understanding” in etymology: but very different in meaning; and the latter—the English word,—can never be better explained or illustrated by its etymology.

Words change in their meaning by time, and by the societies and schools in which they are used: as “sin,” the “soul,” the “world,” “heaven,” “faith,” have new meanings given to them in Christian religion. It is all a mere matter of use. The mind advances, and enlarges the sense, but still uses the same words. Therefore it is impossible that the study of etymologies should do

other than cramp the use, and lead the reasoning astray. "Righteousness" no longer means "justice," as it did. "Sanctify" (John xvii. 17.) originally meant, set apart; but the dwelling studiously on the first sense, or even too much upon the type, distracts the thought and conscience from the proper spiritual work of the divine Truth, the Word written and incarnate, upon the soul.

"Our systematic theology generally predominates over our exegetical theology." (Dr. Schwartz. "Scattered Nation," p. 159, June, 1868.)

The examination of religion in its types is one of the stand-points which some people adopt. And the too exclusive use of it may amuse the mind away from the moral and spiritual application of the antitype. Symbolic religion in like manner and measure, and more, may make religion an art, and one of the fine arts,—so that instead of renouncing the world and mastering and sanctifying human nature, it becomes a passion, depraving the soul, and degrading it to sensual indulgence and worship of the creature.

The scientific stand-point is the most usurping at this period; especially as it allies itself so intimately with pride of intellect and self-conceit,—so that it confidently refuses the rivalry or aid of any other authority. Questions such as these,—the inquiry, what kind of fire and trumpet was it at Sinai, whether of thunder or volcanic?—draw away the mind from the real point, the doctrine of the law of wrath. So, of what nature was the manna? from the real point, the doctrine, that *God* fed them miraculously; and that man doth not live by bread alone. So, whether the passage of the Red Sea, and of Jordan, were effected by earthquakes; this diverts

the soul from the doctrine of the baptism of faith and affliction,—the fleeing in contrition and terror from the world and the pursuit of sin and temptation. The composition and shape of the cloud,—from the revelation of God's providence and grace; and that it is light to these, but darkness to those. And this throughout, in the examination of the physical nature of all miracles.

Physical science, that is, the philosophy of external, inanimate nature, having made great and flattering advances, so engrosses the world at this period, that it furnishes the almost sole stand-point from which men reason in all philosophy: even in moral and religious philosophy. The stand-points of physical and moral philosophy are not only different, but opposite. Mansel has shown this clearly and demonstrably. Man has two kinds of experiences. The one is of the phenomena of material nature: the other is of mind. These experiences are opposite in character. The experiences of external, inanimate nature are that of inaction, uniformity, law, certainty, necessity; and the law which operates this uniformity—necessity, is the subject of our investigation. Our experiences of animate nature, of life, of mind,—our internal experiences within ourselves, and the same in other animate beings, as confirmed by our observation of all their movements, is that of action, will, freedom of will to act in this way or that,—not of necessity: consequently, not with certainty and uniformity. It is the difference between life and matter; than which no two things can be more different, and opposite. The very principle of the one is inaction, uniformity: of the other, action, will,—and in consequence,

uncertainty. The very idea and opinion of certainty, of uniformity, of law, is, and is grounded in, the notion of the inaction, the impotence of matter, of substance : the absence in it of mind, life, will, action,—the ability to choose and dispose itself. “The experience in the one is that of physical succession : in the other, of moral action.” (Mansel.) To make one the measure of the other, therefore, is the greatest absurdity. It is to measure feeling by the foot-rule, or thought by the bushel. It is true, and of necessity, that the operations of the one should be metaphorically described by words and ideas properly belonging to the other. “Operation” itself, “action,” is taken from living motion of the will, and applied to that which has no will, or power of action. “Law” itself, which is most applied to physical succession in matter, which has no will, is taken from animate, intelligent being, which has mind and will, and the power of making and ordaining rule and law. So election, attraction, force, cause, are all metaphors taken from the action of living beings. In like manner our idea and expression of motion in the mind, of effect and consequence, weight, constraint, impulse, are applied to the mind and will metaphorically, from matter and substance which have no will. The very idea and expression “Law,” though primarily applied from mind to matter, is again reflected back to will from matter, with all the impotence and lifelessness of inanimate nature impressed upon it, because of the engrossing labour and immense importance which is given to the study of material and physical nature : being the fashion of the day, and the most capable of scientific and profitable pursuit, and therefore the most

tasteful to human appetite, and flattering to human vanity. But it is obvious that these metaphorical expressions, if used as more than metaphors, and accepted and estimated as realities instead of metaphors, must lead us astray, and pervert our apprehensions, as being founded in false analogies, or analogies not of truth but of convenience.

But the true and sound analogy is that which is to be derived—not from matter to mind,—but that which is to be drawn from mind to mind, from will to will, from life to life, from spirit to spirit; so that if we believe God to exist, to live, to have mind, and will, and power and wisdom,—to be a living, active, willing, operating, intelligent spirit, we must believe that He wills, and disposes, and makes laws both physical and moral, and works with them and enforces them for fixed purposes, and departs from and changes them, for occasional and suitable purposes, and in all things according to the operations of *our* minds, and intellects, and wills,—only in a higher and more perfect manner, according to His omniscience, and omnipotence, and perfection in power, knowledge, truth, wisdom, and goodness.

But if we take our stand-point from matter to judge of mind, from impotence to power, from necessity to will, from the dead to the living, what a depth of folly and scepticism we must fall into!

We cannot conceive the possibility of freewill upon physical analogies,—to which for the most part philosophers confine themselves. But we have as much right to the stand-point of human nature and experience; and then the truth is easy, and experimental, and indisputable.

Making the phenomena of the material world and physics our stand-point blinds us to the analogies furnished by animate, intelligent, spiritual nature; and in general every branch of knowledge and inquiry has its own proper stand-point; and the taking a wrong stand-point in the investigation of any subject blinds us and incapacitates us from apprehension and use of the true analogies belonging to it.

Controversy furnishes a stand-point, or numerous stand-points, which constantly distort our view of religious truth, by engrossing our apprehension in regard to them: becoming, like other artificial tastes, more engrossing than the natural ones. Hence, in the Litany, after "O God 'the Father:,'" "O God the Son, 'Redeemer,'"—we have, "O God the Holy Ghost, '*proceeding from*' the Father and the Son," instead of "The giver of life, and sanctifier:" intruding a mere article of controversy and dispute instead of a practical religious precept. The word "Trinity," being a scholastic and not a scriptural word, is repeated and repeated more than fifty times in Novello's 223 hymns, for instance: while the offices of each of the Three Persons are scarcely inculcated a dozen times in the same collection. The Protestant stand-point is the negation of Roman Catholic error.

Thus theological, scientific, and controversial stand-points distract and distort our minds and souls from pure religious truth.

The artistic stand-point approves every extreme of the nude with an admiration and passion which ignores the modest sense and moral sensibility.

It follows that every one has to some extent a Logic

of his own : as I have in some measure illustrated already in the First Book.* The physical philosopher has his material method and standard of measurement, which he seeks to apply to all subjects, social, political, and moral. The mathematician has his method. The artist has his method. The lawyer has his method. The physician, surgeon, anatomist, have each their method. The wit has his method.

These are primarily and properly applied by each to his own profession and pursuit ; secondarily, and less appropriately, to all other subjects and inquiries. These may be said to be only prejudices therefore. But they are methods more than prejudices. As man can have views and methods only according to his senses, and faculties, and experiences, and not, perhaps, according to the real constitution of the universe, material and spiritual, so individual men must have methods according to their surroundings and habits, locally, nationally, educationally, professionally, religiously. Prejudice is named as applied to particular persons, and opinions, and subjects. This now spoken of is a general habit and method applied to all subjects.

This may be supposed again to be only a modification of the one faculty of judgment. But it is more and wider than judgment. Judgment is in one sense all Logic ; it is the governing principle in it : especially in life and morals. But distinguishingly there is apprehension also. And even the apprehension is

* Bk. i. ch. 11. Analysis of Judgment.—The Law of the Mind. Also Bk. ii. Part II. The Exercise of Judgment, pp. 291, 292.

warped and wrested by these modifications of mind, and method, and tact.

Now, it is obvious, that if these stand-points so modify and distort our logical apprehension and judgment of things not rightly viewed from their position and true centre,—that these ought to be duly acknowledged and estimated; and being estimated and appreciated, their error of vision ought to be properly allowed for and corrected. And in the knowledge and correction of them must consist one of the nicest operations and one of the chief uses of Logic. But the assuming of an entirely wrong and opposite stand-point must infallibly lead to an utter distortion and error in dealing with the particular subject in hand. Such an error is shown by Mansel to arise when religious philosophers start from the inquiry after, or supposed knowledge of the nature of God, and thence deduce His relations to, and dealings with men. Whereas the Bible, the only true source of religious knowledge, invariably assumes man as he is, morally, and socially, and intellectually, as the *subject* of God's dealings and revelations; and rises and reasons from man,—in his good and evil nature, and habits, and apprehensions, and analogies,—to God and His dealings and laws,—not from God and His nature and essence,—of which we can otherwise know nothing,—to man.

This is an example of an entirely wrong stand-point. Of nice error and perversion, from gradual change of stand-point, an example is the following. Figurative expressions have a very different force and effect in this philosophic age of fine distinctions and accurate definition, from what they had in former times,

when thought and language were poetical, imaginative, impulsive, fuller of feeling than of reasoning. In the Bible, and generally in the East, figure and reality were spoken of as one: type as antitype; symbol as act; the thing prophesied as present or past. Religion had no time. And in accordance with this, there is in the Hebrew a constant interchange of tenses and persons. How very different may be the meaning of the following stanza, according as we read it in the modern matter of fact, philosophic sense, or in the ancient free and poetic sense,—

“Thee we adore, O hidden Saviour, Thee,
 Who in thy Sacrament dost deign to be;
 Both flesh and spirit at Thy presence fail,
 Yet here Thy presence we devoutly hail,
 O Christ, whom now beneath a veil we see.”

NOVELLO, 206.

The marked difference of stand-point, in religion, is between the objective and the subjective. The above may be viewed and taken from either point. The following more distinguishingly adopts the subjective point:

“O God, unseen, yet ever near,
 Thy presence may we feel.”

NOVELLO'S *Holy Communion*, 207.

What a heap of critical scepticism and nonsense has been founded upon the use of the words “all,” and “every,” and “for ever,” in the Holy Scriptures, merely because every word must now be defined, and used in a strict sense: quite different from the mind and use of the ancient authors of them and their contemporaries:

who understood them in a general and almost metaphorical sense: according to the subject and matter in hand; as the common people, and all but scientific professors and pedantic grammarians, do now equally.*

Thus we see how the perfection of truth depends upon the nicety of stand-point. The right stand-point of religion can only be attained by habitual study of the Scriptures, and the practice of its precepts. Both are requisite for the acquirement and perfecting of religious logic: according to the precept, "He that doeth my will shall know of the doctrine."

Thus I have performed the task proposed to myself, according to the ability and the opportunities given to me, amid absorbing occupations. It is altogether incomplete. No one can be so sensible of its imperfections as myself, it being so much below what I have conceived of the importance and largeness of the subject. It comprehends the proper use, and effectual working, of all the faculties of man,—intellectual, moral, spiritual,—instinctive, and rational.

Imperfectness is the necessary characteristic of a new system; especially one worked out by a single mind, and not raised upon a foundation laid by others. The authorities quoted have not been those which have

* "The Scriptures avoid abstract definitions like a pestilence."—Oetinger.

"Half the heresy in the world is the result of trying to define."—Thalatta, p. 33.

formed or informed my mind ; but are such as I have met with and used in encouragement and confirmation of views already firmly taken. Nevertheless, in their several and particular branches, some of the authors quoted have treated their special topics with a power and perfectness which I have not been able to give to the whole as a comprehensive system.

More may be done, and the work may be carried further by others at a future time. It is sufficient to me now that I have the support of some inquiring, independent minds : who seem to show in what direction the opinion of the age is working ; and it is seldom that one mind is working in a profitable direction, without others being concurrently occupied in the same pursuit,—at least in topics nearly allied and cognate to it. Such aspirations are, in effect, the natural elaboration and evolution of opinion, growing necessarily out of the present position and progress of society, its aims and requirements.

Buchanan, Mansel, Tatham, McCosh, Hengstenberg, and many others, some of whom I have quoted, have been and are pursuing topics which are much in accordance with and confirmation of the above proposed system. I fully believe that many others, that the general mind—the practical and useful thinkers, will fall into the same course : however much, and however long, it may be delayed, impeded, resisted. But, perhaps, this little treatise may stand alone, and unadvanced. Perhaps it is enough. No one has amplified or added to Bacon's "Organon." The incompleteness may be its virtue. Each one who feels interested and persuaded may find that he has something to do

for himself: that the treatise is more suggestive than satisfying. This may be best. For in the use of truths and principles there must be a certain self-appropriation, a self-origination of them, a making them your own, by every person, each for himself, before he can make an operative and effectual application of them.

If amplification and addition should be given to portions of this work it might be chiefly, among others, in the following branches:—Faith as a general principle, may be extended to Faith in Christ; the moral faculty may be enlarged to spiritual discernment; other moral and instinctive faculties may be added, as being agents in reasoning; the foundation of prejudices in character may be further shown, and the moral nature of truth and wisdom.—The realisation of religious truths and spiritual knowledge practically and in the First-intent; further illustration and proof of the principle that the common people may be the greatest proficients, and have the best spiritual discernment in religion; the further distinguishing of philosophic from Christian religion: elimination of heathen elements from Christian truth,—of theology from theosophy; extension of divine analogy.

I have one only further task to perform,—which has been the end and object of the whole; and that is, to propose an improved system of Exegesis,—of Bible interpretation, in application of the principles above set forth:—after which may I be privileged to enter into my rest.

THE END.

